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ABSTRACT

In this anthology of papers by academic and other experts, the job creation potential of a major public jobs program is explored. The authors were encouraged to develop new ideas and to estimate the impact of their approach. In general the ideas reported relate to jobs created as the result of responses to social and environmental concerns. Housing needs and health services are just two of the concerns mentioned. The topics are covered in four sections: "Public Jobs for the Public Good," "Estimating Public Job Creation Possibilities," "Job Creation Projects that meet Local, Regional, and National Needs," "Job Creation: Identifying Appropriate Target Areas." In "Public Jobs for the Public Good," for instance, provisions for new kinds of services for the elderly, disabled, and working parents are discussed. Jobs created through new roles for the neighborhood center, community arts center, community organizations, and state, regional, and national organizations are also suggested. In addition, potential problems with wage rates, auxiliary services, criteria for employment, and upgrading are addressed. (CSS)

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Perspectives on Public Job Creation

R & D Monograph 52

U.S. Department of Labor
Ray Marshall, Secretary

Employment and Training Administration
Ernest G. Green
Assistant Secretary for Employment and Training
1977

This report was edited by Dr. Florence M. Casey, Office of Research and Development, Office of Policy, Evaluation and Research, Employment and Training Administration, U.S. Department of Labor. The contributing authors were encouraged to express their own judgment regarding possible approaches to the creation of jobs in the public sector. Their interpretations or viewpoints do not necessarily represent the official position or policy of the Department of Labor.

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Preface

"Perspectives on Public Job Creation" is an anthology of papers by academic and other experts in which the job creation potential of a major public jobs program is explored from a diversity of viewpoints. The twelve contributing authors were encouraged to adopt a relatively freewheeling approach to the issue in order to elicit the greatest possible number of ideas, but they were also asked to estimate the employment impact of different approaches to the problem of creating public jobs. As a result, some of the projects described or suggested in the papers may not be feasibly undertaken at the present time for legal or practical reasons (e.g., certain statutory restrictions on wage subsidies for jobs in the private sector under the Comprehensive Employment and Training Act of 1973 or certain railroad rehabilitation projects). Prime sponsors should, therefore, consider the legal as well as the practical feasibility of any projects discussed in this monograph. Nevertheless, the authors have identified a large number of potential targets for job creation projects in a wide range of occupations and industries. There are several ideas discussed which could be adapted to suit the needs and resources of individual areas and which could be extremely useful to prime sponsors, who are seeking ways to implement new programs in their respective jurisdictions. Since the contributing authors were encouraged to express their own judgments, interpretations or viewpoints stated in this document do not necessarily represent the official position or policy of the Department of Labor.

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I

Public Jobs for the Public Good

by Nat Weinberg

Public service employment is usually thought of as a means to provide work and incomes for the unemployed. Crucial though that purpose is, it overlooks the fact that public service employment can and should help avoid the losses to society resulting from failure to make constructive use of available labor time which, once dissipated in idleness, can never be recovered.

WPA provides an instructive lesson in this regard. It utilized the abilities and talents of the unemployed--whether to construct [illegible] buildings, roads and bridges, or to write guidebooks, paint pictures, stage plays or to develop new statistical series--to make enduring contributions to the Nation's physical, cultural and intellectual wealth. At the same time, of course, WPA helped to maintain the morale of those it employed, to preserve and improve their skills, and to provide them with incomes.

Although WPA never came near to providing jobs for all the unemployed, it nevertheless did demonstrate that an attempt to use the abilities of the jobless for society's benefit need not run up against the sharp numerical limits on job creation inherent in today's narrower concept of public service employment as essentially a means to supplement existing public functions. At its peak, WPA employed close to 3 1/2 million workers in a labor force roughly three-fifths the size of today's, and, given sufficient appropriations, could have provided useful employment for many more.

Use of the abilities of the unemployed for socially desirable purposes makes sense even from a crass economic standpoint. As a society, we reject the notion that those without jobs should be left to fend for themselves. One way or another--through unemployment insurance, food stamps or welfare--we protect them (although often inadequately) against starvation. Giving them work would mean gaining something of value to offset the cost of keeping them alive. Even when providing the unemployed with work would mean additional outlays for capital equipment, supervision, wages, etc., the offsetting value of their contributions, at the very least, would usually result in lower net dollar costs than those of sustaining them in idleness. More likely, there would be a net gain, rather than merely a smaller net cost. When less easily measurable costs of unemployment--increased crime, deterioriation of morale and skills, family disruption, psychological problems, increased suicide rates, etc.--are taken into account, a net gain seems certain.

Given the hardships and economic waste caused by unemployment, a humane and rational society would insist that the primary goal of economic policy should be stable full employment--defined not in terms of a target unemployment rate but rather as Sir William Beveridge defined it in "Full Employment in a Free Society." He wrote that full employment:

> "means having always more vacant jobs than unemployed men, not slightly fewer jobs. It means that the jobs are at fair wages, of such a kind, and so located that the unemployed men can reasonably be expected to take them; it means, by consequence, that the normal lag between losing one job and finding another will be very short.[1]

To put it another way, unemployment would be reduced to the minimal frictional level.

Unfortunately, during the 1960's and early 1970's, the U.S. unemployment rate has averaged about 2 1/2 times as high as the weighted average rate for the other industrialized democracies for which the Bureau of Labor Statistics computes comparable figures. Despite the far greater vulnerability of those other countries to fluctuations in demand for their exports, none of them (except Canada, whose unemployment rate is largely determined in the U.S.) has even approximated the levels to which U.S. unemployment has soared.

There is no immutable law that condemns us to such unemployment levels. We know now that the level of unemployment is a function of economic policy. Nevertheless, the history of U.S. tolerance for unemployment suggests at least a strong probability that there will be room and need for greater numbers of public service jobs for years to come. With that as the outlook, it is not enough to think in terms of merely peripheral and temporary public service employment programs intended to take up the transitory slack in demand for labor that might be caused by unforeseeable and uncontrollable events. Instead, there will be need for massive, continuing programs which should be carefully planned to yield the maximum possible social and economic benefits.

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[1] William H. Beveridge, Full Employment in a Free Society (New York: W.W. Norton and Co., 1945), p. 18.

In view of the magnitude of the unemployment problem we seem likely to face in the years ahead, the bulk of the publicly provided jobs will have to come from expanded and accelerated public works programs and from the standard form of public service employment involving augmentation of existing public services. Public works employment, although expensive per job directly created, offers some hope of further reducing the overall size of the unemployment problem through its indirect effects in stimulating the materials-supplying and transportation industries (although part of that stimulus will result in more hours of work for those already employed rather than recall or hiring of additional workers). The standard type of public service employment, although offering a vast job creation potential because of the widespread inadequacy of many public services, presents the problem of the "revolving door" or "substitution" effect involving the replacement of regular workers by others financed out of funds made available under public service employment programs. (It should be possible, however, to avoid or minimize that effect.)

The inadequacies of public services suggest that expansion of public service employment should not be regarded primarily as a mere stopgap to take up temporary slack in the labor market, but as a permanent feature of our economy. That would be true even if the private economy offered far more job opportunities than it does now or is likely to offer in the future. There is nothing inherently more virtuous or valuable in $100 spent privately in a night club than the same amount spent publicly on health or education. A healthy competition between the public and private sectors for a supply of labor insufficient to meet the full demands of both would fulfill the first of the conditions in the Beveridge definition of full employment.

The prospect of a heavy burden of unemployment in the years to come affords us an opportunity to experiment on a large scale with new forms of public services and new methods of delivering them. In the following pages I will attempt, first, to describe some of the kinds of services that it would be useful to provide and to suggest forms of organization that could be used to deliver them. The delivery system is intended primarily as a means to help restore the sense of community that seems rapidly to be disappearing from our society--to replace atomization, loneliness and alienation with the warm and close bonds that unite neighbors when they have frequent occasion to meet and to join in activities of common interest. In addition, I will attempt to deal with some of the practical problems that would be encountered in conducting the kinds of activities I propose.

New Kinds of Services

The word "new" in the heading of this section is to some degree an exaggeration. As I prepared to write this paper I was amazed to discover how many of the kinds of services I had in mind were already being provided in scattered localities across the North American continent, under the CETA program, the Canadian Local Initiative Program (LIP), or by private, voluntary organizations. At the risk of being accused of reinventing the wheel, I will, nevertheless, include services already being furnished in one way or another in the hope that something new and useful will be found in my conception of them.

By way of further preface to the description of the services themselves, three additional points should be noted. The first is that a number of the activities suggested call for a wide range of skills. For example, drama requires (or, in some cases, may require) not only actors but also musicians, costume designers, set designers, stage carpenters, stage electricians, etc. In many cases, the nature of the skills auxiliary to the primary activity will be obvious and I will not bother to identify them. In some instances, where it would not be efficient to employ a person with a given skill to service a single group (e.g., a drama group), economies of scale may come into play when a community center is established to serve a network of the neighborhood centers proposed below.

The second prefatory point is that many of the activities should include significant training components for those involved in both the primary activity and the supporting work. For those already trained to perform their respective functions, existing skills should be preserved and polished.

The third point is that the activities suggested, with very few exceptions, are highly labor intensive, thus generating a high ratio of jobs to expenditures. To put it another way, outlays for equipment and materials per job created would be relatively small.

The list of useful public services that could be provided but are presently lacking probably could be extended far beyond those mentioned in this paper. Those that are mentioned, therefore, should be considered as illustrative. Their recital probably will bring many others to mind.

SERVICES FOR THE ELDERLY

With the disappearance of the extended family, advancing age has become a tragic experience for many with alert and active minds but enfeebled bodies. Many of those facing the threat of terminal exile to nursing homes would be far happier if it were made possible for them to live out their lives, even if alone, in their accustomed surroundings, in their own homes with their own familiar possessions, and, to the extent they are physically able, to keep up their ties with friends, neighbors and relatives. The preference for staying put, for avoiding the trauma of uprooting involved in transfer to a nursing home, is probably strong even when the latter is of high quality. The fact that many nursing homes are abominations is an additional and compelling reason for minimizing the number of such transfers. This would make it easier to enforce standards of humane conditions and treatment in nursing homes and to shut down permanently those institutions unable or unwilling to conform to such standards.

Provision of a few simple and relatively inexpensive services would make it possible for a high proportion of the aged to remain where they are as long as they retain some minimum of physical vitality. The kinds of services required would vary with the physical state of the persons to be served. Some could get by with mobility assistance. If a car or a minibus came by their homes to pick them up once or twice a week, they could be taken in groups to shopping centers to replenish their larders and make other necessary purchases. Group rides could also be provided to take them to recreational activities or events, although, because of differences in tastes, the groups for this purpose might be composed of different combinations of individuals than the shopping groups. In some cases (e.g., where a single medical center serves many of the aged), it should be possible to schedule appointments so as to provide group rides for health care purposes. Where group riding is impractical (e.g., for trips to the individual's own, non-institutional doctor, dentist or lawyer), a special dial-a-ride system could be provided for the aged.

For those whom even a ride would weary unduly (and also as a possible alternative to group riding for shopping purposes), mobile shopping centers could be created. These would take the form of trucks stocked carefully with the kinds of foods and other essentials that the aged buy regularly, with attention paid to ethnic tastes along the routes covered by the trucks. Alternatively, the trucks could carry packages of foods and other items made up in accordance with telephone orders placed, prior to scheduled deadlines, by those along the truck's routes. The routes could be varied day by day so that the same truck could serve several neighborhoods in the course of a week.

Some of the aged who are otherwise able to take care of themselves are too feeble or too lacking in desire for food to cook wholesome, balanced meals for themselves. For these, a central kitchen could prepare warm meals to be delivered to their homes by car or truck. The meals could be packaged so that they could be kept warm on stoves or in ovens until mealtime. Where the nature of the meals permits rewarming without deterioration of nutritive value or taste, several days' meals could be provided at a time, thus minimizing the number of trips required to be made by the delivery vehicle.

Some of the aged who are too enfeebled to clean their dwellings effectively could be provided with housekeeping help. Teams of housekeepers (about which more will be said in connection with services for working parents) could visit their homes or apartments at intervals (perhaps once or twice a week) to clean and straighten up for them.

Aged individuals living alone may encounter two other problems for which assistance could be provided. The first is loneliness. The second is danger of a traumatic event--e.g., a heart attack, a stroke, or a household accident--that might go unnoticed because it prevented them from calling for help. Such persons could be served by teams of individuals organized to telephone elderly persons living alone at frequent intervals to talk with them where loneliness is a problem, and, in any event, to make sure than no mishap has befallen them or, if one has, to send help. The persons making the calls could also routinely inquire whether there were any special shopping or other needs of a kind not likely to be filled by the means suggested above, e.g., to renew a medical prescription and to have it delivered or to make a special trip to the doctor. Arrangements could then be made to fill such needs.

Staffing Needs

The employment created by the above-described services would include jobs for passenger car and truck drivers; clerks to schedule rides and deliveries and to receive and arrange for filling orders for food and other needs; persons to take inventory on and restock the mobile shopping centers; sales clerks to fill orders and to take payment on such mobile centers and other vehicles involved in the delivery of warm meals; cooks and other kitchen workers to prepare such meals; members of the phone-calling teams. In addition, qualified supervisors would be needed to organize the services, to develop systems for their effective integration and coordination (e.g., to avoid several car trips where one would suffice) and to train those engaged in providing the services. For example, those charged with phoning the elderly would have to be carefully trained to carry on "loneliness" phone calls in a friendly and helpful way, to make efficient use of their time by avoiding undue prolongation of such calls, to judge whether a request for special shopping or other help warranted action, etc.

Costs

Given the costs of nursing home care, it seems almost certain that the savings the above-described services would make available by reducing the need for institutionalization would far outweigh the costs of providing the services. Whether or not that conclusion is correct could be determined, subject to a reasonable margin of error, by carefully estimating the cost of the services and comparing them with nursing home charges.

Even in the unlikely event that such calculations show that institutional care is less expensive, provision of the services would still be worthwhile as a means of avoiding the immeasurable psychological costs of institutionalization.

The capital costs involved would be minimal. There need be no initial outlay for the cars involved if arrangements are made to compensate the drivers (in addition to their pay) on a reasonable mileage basis for use of their own cars. Relatively few trucks would be needed to serve as mobile shopping centers and for delivery of meals for large numbers of the aged. The ratio of trucks to numbers served would be sharply reduced in high-population-density neighborhoods with heavy concentrations of the elderly. If food and other items were sold by the mobile shopping centers at prevailing retail prices, a revolving fund equal to the cost of the initial inventory might well turn out to permanently sufficient. Such a fund would have to be supplemented only to the extent, if any, that costs of space for warehousing merchandise, truck depreciation, and personnel exceeded the wholesale cost of the initial inventory plus the profit margins included in prevailing retail prices. (Increases in prices at the wholesale level should be compensated for wholly or largely by increases in prevailing retail prices.) The need for supplementation might be avoided if arrangements could be made for direct purchase of some items from the producers. Prepared meals should be supplied at prices equal to either the wholesale costs of food plus preparation costs or the retail prices of the foods involved plus costs for fuel, etc., that would be incurred if the meals were prepared in the home.

Building space would be needed for some of the services--for warehousing merchandise to supply the trucks, for the kitchens used in preparing meals, for the teams of phone-callers, etc. In some cases, however, space might be available without cost in unused or underutilized public facilities. For example, recent sharp decreases in birth rates, plus declining populations in central cities, may make space available in school buildings. /NOTE: What has been said here regarding building space applies to space for certain of the other services described below and will not be repeated in connection with them./

Possible Resistance

Private businesses that perceive certain of the services described above as competitive with their own enterprises would probably resist these programs. Supermarkets and other stores might oppose the mobile shopping centers and the sale of warm meals; taxi owners and drivers might react similarly to the personal mobility services, etc. Such opposition might be diminished somewhat if it were stressed that the market for those services would not be available at all if those served were immured in nursing homes. Private landlords and builders, on the other hand, might welcome the services, and thus help to offset opposition from other quarters, if persuaded that less utilization of nursing homes would increase total demand for dwelling units. With a growing proportion of the population in the upper age brackets, this could be a significant factor in demand for housing.

Prospects for Permanence

We all face the possibility of living to an age at which we will no longer be fully able to take care of our own needs. Many younger people, meanwhile, are already carrying or may soon be compelled to carry the burden of intolerably high nursing home costs for their parents. If experience with the above-described services were to demonstrate, as I am convinced it would, that the shock of institutionalization could be avoided for a significant proportion of the aged, that alone would tend to make permanent maintenance of those services out of tax revenues widely popular. If, in addition, experience should show, as I believe it would, that these services would reduce the private and social costs of caring for the aged, as compared to the costs of institutionalization, it would seem almost certain that there would be widespread and enthusiastic support for the permanent provision of the kinds of services proposed.

SERVICES FOR THE DISABLED

The same range of services proposed for the elderly (plus some additions described below) would be applicable to the temporarily and permanently disabled, although needs for specific services would tend to vary among individuals, depending upon the nature and extent of their respective disabilities.

If a system were established to provide those services for the elderly, it would be a relatively simple matter to include the disabled as part of the client population. Similarly, additional services needed primarily by the disabled, could be extended to those aged persons who have disabilities that qualify them for such services.

The disabled, in some cases, would need visiting nurses, registered or practical or both. In addition, some who live alone would need daily visits by someone able to prepare meals and perform other household chores, rather than the weekly or twice-a-week visits of housekeeper teams proposed for the elderly.

The lives of the blind could be enriched by the services of people who would direct them to facilities where they could learn braille, obtain "talking books," learn to become mobile with the aid of leader dogs, etc. Delivery of braille literature and talking books could be provided for the immobile blind. Similar referral services could be provided for the deaf.

Prospects for Permanence

The visiting services for the disabled described above probably would be less expensive than institutional care. Once these lower costs had been demonstrated, it might be possible to obtain permanent public financing for such activities. The special services proposed for the blind and the deaf might be financed on a permanent basis by the private, voluntary organizations that already meet many of their needs, out of public revenues or by a combination of both.

SERVICES FOR WORKING PARENTS

The need for certain services for working mothers, whether or not they are heads of households, is widely recognized, though far from adequately met. A widowed, separated, or divorced father responsible for maintaining a home and caring for young children has the same needs for help as a working mother. Some of these services are also needed in families in which all the adults work or attend full-time school.

The need for a vast expansion of high-quality and low-cost child care facilities ("Day care" is a misnomer because, in many cases, provision must be made for children before dawn and after dusk and, in some situations, around the clock.) is too obvious to require discussion here. A very sizable number of permanent jobs would be created by such an expansion both for well-trained child care experts and for aides who could operate under their supervision with little or no training. However, the latter could be given opportunities for training that could lead to upgrading. In fact, if both quality standards and quantitative needs are to be met within a reasonable time, there would be vast opportunities for upgrading.

Because of the traditional mores of our society, the working mother, even if her husband is present in the home, usually bears an unfair and intolerably heavy burden. She is expected, besides putting in her stint on the job, to spend many additional hours doing the family's shopping, attending to her children's and her husband's needs, keeping the home clean and neat, etc. For many women, the combination of job and home responsibilities acts as a strong deterrent to labor force participation. In a full employment economy (which hopefully we will some day have), their absence from the labor market would mean a serious loss of potential output.

Under present conditions, the hiring of household help is not a realistic possibility for most women discouraged from taking jobs by the burden of their family responsibilities. The low pay and low status attached to such work and the fact that it is often done under degrading conditions tends to limit the supply of persons willing to undertake it except in times of severe recession.

There would almost certainly be a net gain to society if paid household work were rationalized, thus making it more efficient; if the workers involved were given steady employment under dignified conditions; and if the wages were sufficiently high so that the combination of monetary renumeration and improved dignity and status would attract more workers into the field. The gain would flow from two sources: on the one hand, useful services would be obtained from persons who would otherwise have to be supported in idleness; on the other hand, the ready availability of such services would encourage increased participation of women in the labor force, thus increasing total output.

The ways in which household work might be rationalized can probably be determined only by experimentation with various methods. What follows, therefore, does not pretend to be a definitive solution, but rather one approach that might be worth testing.

The household workers could be organized into teams consisting, for example, of one person who would do such chores as sweeping, dusting, mopping, etc., another who would do the laundry, make the beds, change the bed linen periodically, and generally straighten up; a third could do the dishes and, in accordance with written instructions left by the homemaker, prepare a simple evening meal (elaborate, time-consuming recipes would have to be ruled out) and put it on the stove ready for cooking. (If the stove had a timer, it could be set to have the meal cooked at the desired time.) In addition, one member of the team could pick up a shopping list left by the housewife and deposit it at a central location from where it would be taken, together with similar orders from other families to be filled at the appropriate store or stores. (Discount arrangements might become available based upon the volume of sales involved.) The team would deliver the orders as it arrived at the homes. (I have left open the frequency of the teams' visits to each home they would serve; it might be weekly or twice a week.)

The team members would have steady employment, regular assignments, and the same supervisors from week to week--unlike present domestic dayworkers, whose employment is irregular and uncertain and may involve a large number of constantly-changing and unfamiliar employers and homes. Their roles would become much like those of field workers for a regular business establishment (e.g., workers who install and repair telephones or household appliances), except that they would have regular routes. It seems reasonable to expect that, in time, they would be accorded a status in the eyes of their neighbors comparable to such workers.

Initially, and particularly while unemployment remains high, the household help services should be made available without charge to all families with children in which all the able-bodied adults work or attend school full-time. This would permit the operation to be conducted on a scale which would make meaningful experimentation possible. The net cost would be relatively small, since most of the workers involved would otherwise be receiving unemployment compensation or some other form of income maintenance. Later, and particularly if unemployment were sharply reduced so that there were competing demands for the workers involved, further experimentation might be conducted to determine the size of the fees that typical families might be willing to pay for these services. Fees might be graduated on the basis of family income.

NEIGHBORHOOD CENTERS

We seem, as a people, to be becoming increasingly isolated from each other. Neighborhoods, in the sense of areas in which individuals come into repeated contact with large numbers of their fellows and join together in a variety of activities, have largely disappeared. The reasons need not be explored here, but the results seem to include widespread loneliness and a feeling by many people that something is missing from their lives.

Whether or not the sense of neighborliness can be deliberately recreated is open to question. But it is worth trying.

One possibility might be the establishment of neighborhood centers which would draw people to them for a wide variety of purposes--educational, cultural, recreational, and for various kinds of services and counselling--while at the same time providing them with facilities and outlets for their hobbies, interests, and talents. There seems to be no good reason why people should be required to go off in different directions for each of these separate purposes, encountering different individuals in each locale and establishing genuine personal ties with none of them.

For present purposes it is not necessary to blueprint the nature of such centers down to the last detail. What is needed first is adequate and strategically-located building space. Preferably, it should be near a shopping center or other facility that draws large numbers of neighborhood people to it for other purposes. (This factor could be ignored in a high-population-density urban neighborhood.) It might be possible to find the needed space in an unused or under-utilized public building.

Ideally, a variety of government facilities that serve large numbers of the neighborhood's residents should be housed in the same building or in adjacent or near-by buildings. This could include, for example, the post-office and the unemployment compensation, employment service, welfare and food stamp offices. Perhaps, if the neighborhood centers concept takes hold, public buildings in the future will be designed to house under one roof all facilities serving the public in the neighborhood, while providing space for the centers. If, as suggested below, the center included counselling and referral services, time and travel for the local residents would be minimized by having relevant government offices in the same building.

The space, obviously, should be large enough to house the full range of activities that are contemplated for the center and should be suitable for adaptation to them. Those activities should be designed to appeal to people of all ages, races and classes in the neighborhood to be served. If possible, there should be adjacent outdoor space in which children--and possibly adults as well--could engage in outdoor games and sports.

The members of the staff responsible for conducting each of the activities should be drawn from among the unemployed. They need not in all cases be professionals in their respective fields--although professionals should by no means be excluded. They could be hobbyists, provided they are knowledgeable, reasonably skilled, and able to communicate their knowledge and skills to others. The centers' regular staffs could be augmented by teachers from community colleges who could conduct regular classes on the centers' premises in any subject in demand by a sufficiently large number of those in the neighborhood. (It would be understood that payments made by all the centers in the community for the services of such teachers would be pooled by the college to add qualified unemployed teachers to its staff.) In cases where no single center could make full time use of a staff member, his or her services could be shared by several centers in the same community and he or she might also be employed by (or operate out of) a community center of the type to be described below. In other cases, the staff member might be paid on an hourly basis for time actually worked.

Before the staff is hired, the neighborhood should be circularized and canvassed to determine the kinds of activities in which there might be substantial interest. On the basis of the canvass, the staff to be recruited from among the unemployed might include persons able to teach English to foreign residents; to teach foreign languages; to lead a band, a chorus, a dance group or a theatrical group; to teach creative writing, drawing, painting, printmaking, sculpture, textile dyeing and printing, photography, woodworking, dressmaking, and other arts and crafts; to run a movie projector for the showing of films that could be obtained free or inexpensively; to direct athletic activities or calisthenics, etc. 2/ The range of possibilities is almost endless.

The neighborhood center should also, to the maximum extent possible, be the focal point for a variety of public and private services used by the neighborhood's residents. Unless and until the centers are housed, as suggested above, in the same building with a variety of government offices serving the public, the same purposes might be accomplished in part by other means. For example, the center might include the equivalent of the kind of small-town limited service post-office that often occupies a corner of a store and is operated by the manager or the owner of the store as an auxiliary function (e.g., a member of the center's staff primarily responsible for other duties could handle requests for postal services' as they were made). Similarly, the unemployment compensation, employment service, food stamp, welfare offices, etc. could, if there were sufficient need, assign members of their respective staffs to work in the centers. Alternatively, some members of the center's staff having other duties could be trained to serve part-time as agents of such offices. In that case, they should receive an appropriate part of their pay from the agencies involved.

If the nature of the facilities makes it feasible, the neighborhood child care center could also be located on the premises of the center. In addition, private voluntary organizations of various types might find it useful and should be encouraged to assign members of their respective staffs to work part- or full-time in the centers.

It should be obvious that, aside from convenience to the neighborhood's residents, a major purpose of having services available at the center is to attract people to it, thus enabling them to familiarize themselves with the activities it provides, with a view to involving them in such activities.

2/ If there is a heavy concentration of a particular ethnic group in the neighborhood, it would be well (particularly if there are to be musical, choral, dance or dramatic activities) to seek out staff members to lead those activities who are familiar with the culture of the ethnic homeland.

Toward the same end, the center should also be open for use as the local meeting place of social, fraternal and other organizations to which the neighborhood's residents may belong. Similarly, space should be made available for ad hoc recreational activities such as bridge, chess and checker games, etc.

In addition, the neighborhood should be informed at frequent intervals (perhaps weekly) of activities at the center. This could be done through posters, circulars, the local newspapers, radio, TV, etc. The residents should be invited to attend plays, musical events, sports events, arts and crafts exhibits, etc., generated by their neighbors through use of the center's facilities.

Each center should include on its staff at least one person able to provide counselling and referral service to persons requiring assistance with personal and family problems. If the neighborhood is one in which large numbers of persons are more fluent in a foreign language than in English, the counsellor should be able to speak that language. The counsellor should be recruited from among the unemployed and, if no trained person is available, should be given the necessary training.

Some activities originating at the center would not be conducted on its premises. For example, the people participating in the center's activities might decide to beautify the neighborhood. (This is one type of activity that might be pursued through neighborhood organization for self-help discussed below.) Groups might be organized to plant trees along certain streets. Other groups, working under the direction of artists, might decide to decorate the neighborhood school or to paint murals on the blank walls of neighborhood buildings. A band organized in the neighborhood center might agree to play music in the neighborhood park on summer evenings. Here again, a wide variety of projects could be initiated by people participating in the center's activities.

The neighborhood centers would serve also as focal points for neighborhood self-help organizations, to be discussed below.

It seems likely that some subsidy might be required in addition to any fees that could reasonably be charged. (This is also true of public child care centers.) But the social gains, indicated above, could well offset the cost of the subsidies. In that case, the public might decide to make the service available on a permanent basis even after unemployment had receded substantially.

Retiree Centers

Retiree centers providing essentially the same range of activities and services proposed above for the neighborhood centers have proven their value and, in many cases, have been successful in attracting large numbers of older persons.

Questions can be raised, however, about the desirability for either group of isolating the elderly from younger persons. Moreover, economies of scale would make it possible to provide a wider range of activities and services for both groups if the retiree centers operated as part of the neighborhood centers. Some activities and services at each neighborhood center should be designed specifically for the retirees (e.g., pre-retirement counselling and assistance with Social Security and Medicare problems), but the latter should have the fullest practicable access to services available at the centers.

In addition, the centers could serve as the focal points for the special services for the elderly proposed above.

Prospects for Permanence

The establishment of neighborhood centers should not, in my opinion, be visualized as a temporary program designed solely to provide work for the unemployed. Under present conditions, initial recruitment of staff for the centers should be focused on the unemployed--but the centers, if they prove as valuable and successful as I expect, would undoubtedly create a demand for their continuance. The amount of tax revenues required to support them would be relatively small. To some extent, the centers would involve, not additional expenditures, but a reorganization of recreational and cultural activities and certain types of services already supported by public funds. In addition, in neighborhoods where unemployment is especially severe, the centers' staff requirements for daytime activities would diminish as unemployment abates.

COMMUNITY ARTS CENTER

The arts and crafts activities proposed above for the neighborhood centers are intended to enable people to pursue their interests and improve their skills, as well as to generate local recreational events, regardless of the level of talent of the individuals participating.

Every community has its quota of genuinely talented unemployed and underemployed artists in a variety of fields. Initially, the latter group should be employed, as WPA employed them, to put their talents to public use. Later, the same approach can be used to employ those whose talent is discovered and developed in the neighborhood centers.

Communities of sufficient size could accommodate a community arts center embracing the full range of arts and crafts for which capable jobless persons are available. They should be employed primarily to apply their skills--to stage plays and musical events, to decorate public buildings, to do creative writing--and should be provided space and facilities (e.g., presently-closed movie house to serve as theaters) and equipment to practice their art. In addition, however, they could be drawn on, part time, to serve the neighborhood centers.

The community arts center should also arrange for interchange of theatrical and similar events and arts and crafts exhibits among the neighborhood centers within the community (e.g., a play staged by neighborhood center A could be routed to centers B, C and D).

Such interchanges would be particularly valuable in communities where separate neighborhoods have different racial and ethnic characteristics. Ethnic pride deserves encouragement but the cultivation of respect for other cultures is at least equally important. To the extent that there is a distinctively American culture, it consists in large part of a conglomeration of features drawn from the separate cultures represented among our people. The further development and enrichment of American culture would be stimulated by the kinds of interchanges proposed.

The community arts center should also be charged with the responsibility for identifying particularly talented individuals and groups emerging in the neighborhood centers. It could encourage their development and make their talents available to a wider audience by arranging community-wide events and exhibits at which such individuals could perform or display and, in some cases sell, their work. This could be done through community-wide contests judged by panels of experts, but it also could be done less formally.

The separate community arts centers could be tied into State, regional and national networks as proposed below.

As in the case of the neighborhood centers, I visualize the community arts centers, not as temporary expedients to help sop up unemployment, but as permanent features of our society. To achieve that status, of course, they would have to demonstrate their value.

COMMUNITY ORGANIZATIONS

The existence of neighborhood centers would facilitiate, (in fact might lead to) spontaneous generation of organizations of neighbors to deal with their common problems. Such organization could be directed toward an almost endless variety of purposes. One such purpose, neighborhood beautification, has already been mentioned. Other possibilities include creation of joint buying groups (e.g., to purchase produce directly from farmers) and even cooperative stores, formation of a neighborhood credit union, lobbying to bring the needs of the neighborhood (from a new traffic light to a new school building) forcefully to the attention of the local authorities, volunteer working groups to rehabilitate deteriorating homes and other buildings in the neighborhood, groups to visit and provide needed help to sick neighbors, joint travel groups to obtain cut rate fares, etc. However small or ambitious the project, it would contribute to some degree to restoring the concept of neighborliness, with all its connotations of mutual help and interlocking networks of friends.

Training Community Organizers and Others

While self-help groups might spring from the initiative of people participating in the neighborhood centers' activities, imaginative and able community organizers could help to bring larger numbers of such groups into being, covering a wider range of activities, and could help them become more effective in achieving their ends.

Moreover, management of the centers themselves will require many of the skills of well-trained community organizers. Either the manager of each neighborhood center should be a trained or experienced community organizer or the center should have such an organizer as a member of its staff.

The basic capabilities and personal qualities that make for effective community organizers are undoubtedly latent in many of the unemployed. Demand for greatly increased numbers of community organizers would be created by a decision to establish a national network of neighborhood centers and community arts centers.

Thus, a need would arise for training centers to develop community organizers. In time, the need would probably also arise to train community organizers in certain specializations. For example, a significant number of neighborhood centers might want to develop cooperatives stores or credit unions. The chances for their ventures to succeed would be greatly enhanced if they started on a sound footing, based upon expert advice given them by persons equipped with specialized knowledge in those fields. A combination of such knowledge with the skills of a community organizer would increase the likelihood that the advice given would be heeded.

Since demand for the services of specialists in any one community is likely to be limited, they would have to operate out of and be routed by the State, regional or national bodies proposed below.

STATE, REGIONAL AND NATIONAL ORGANIZATIONS

Each neighborhood center and community arts center should be able to profit from the experience of others, but since there is very little experience to build on thus far, the centers would have to feel their way and mistakes undoubtedly would be made. Mistakes could be minimized, however, if the centers were linked in mutually supporting and reinforcing networks. The networks could be established at the State, national and regional levels, each with its own headquarters.

The headquarters would serve, among other things, as clearinghouses for exchanges of experiences. They could hold periodic, carefully-prepared conferences of the leaders of the neighborhood and community arts centers, they could issue publications, and they could respond to inquiries and requests for specialized or other assistance addressed to them by the neighborhood and community centers. They could also reinforce the efforts of the community arts centers to encourage the development of talent by routing outstanding local performers and arts and crafts exhibits within their respective jurisdictions.

Potential Problems

A number of practical problems are certain to be raised in connection with the foregoing proposals. All of them cannot be anticipated, but a few of the foreseeable ones are discussed below.

WAGE RATES

In view of the widespread tendency to view the victims of unemployment as in some way responsible for their own plight, it probably will be urged that unemployed persons hired to perform the functions outlined above should be paid less than prevailing wage rates [3] for the work they would be called upon to do. In further support of that position, the argument would be advanced that wage rates below the prevailing level would provide an "incentive" for the individuals involved to take private employment.

That position makes neither moral nor practical sense. To pay anyone less than the established value of the work done is to cheat the employee. The government has no more right to do that than any private employer and the government, in addition, has an obligation, which it has acknowledged in a number of ways, to encourage and maintain fair labor standards rather than to undermine them.

Moreover, there is no inherent superiority of private over public employment. Therefore, why try to drive people from the latter to the former? To do so would be particularly senseless in the case of the activities proposed because it is intended, assuming they prove valuable, to continue them on a permanent basis. Payment of less than prevailing wages would cause disruptive turnover of personnel, thus undermining the efficiency of the programs and lessening their possibilities for success. Experiments to determine whether the programs should be continued would therefore be inconclusive because, if and when they failed, it would be impossible to say whether failure was due to turnover (which would be most likely to involve the departure of the personnel with the greatest capabilities) or to the inherent defects of the programs.

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[3] It should be understood that the phrases "prevailing wage rates" and "prevailing wages," as used here, are intended to cover the range and levels of fringe benefits usually provided as well as wage rates as such.

Payment of prevailing wage rates would also minimize the danger of conflict with unions representing workers engaged in work similar to the types proposed. Avoidance of such conflict would be important to ensure the widest possible public acceptance and support for the proposed programs. In the case of the neighborhood centers, many of whose clients would be drawn from unionized occupational and income groups, conflicts with unions could be particularly damaging to efforts to gain maximum participation in the center's activities.

AUXILIARY SERVICES

To the maximum extent possible, all work arising out the proposed programs should be performed by unemployed persons hired for that purpose. This would include, for example, alterations to and decorating of the premises to be used for the neighborhood centers. Here, too, conflict with unions could arise which should be avoided if possible. Generally, unions will tend to be sympathetic to programs intended to employ those without jobs; however, there could be problems in exceptional cases which might be eased if approaches were made in advance to the top national echelons of the unions, where a broader view is more likely to be taken. Special arrangements might be made in some cases to treat the workers actually performing the work (assuming that all or most are relatively unskilled and are doing the work under the supervision of an experienced person, who might well be a union member) as apprentices under the appropriate union's apprenticeship program. This would have the additional value of increasing their employment opportunities if and when they leave the programs.

In some cases, work may have to be contracted out to private employers to smooth relations with the unions, as well as for other reasons, it would be desirable to contract for such work with unionized firms.

CRITERIA FOR EMPLOYMENT

Until a definite decision has been made to maintain any of the programs on a permanent basis, one of their prime purposes should be to provide work for the unemployed. To the maximum extent possible, therefore, all such jobs, including administrative and supervisory positions, should be filled from among the unemployed. Ability to do the work involved, of course, must be a criterion applied to all jobs, but it need not be and should not be present ability. Where there is sound reason to believe that an individual has the potential to do the work after a reasonable training period, the training should be provided and he or she should be paid (or unemployment compensation should be supplemented, State law permitting) while training is underway. In addition, and particularly in the case of the neighborhood centers, efforts should be made to recruit from the area to be served. This would create personal ties to the centers among people (relatives and friends of the person hired) whom it is desired to attract to them.

UPGRADING

All possible jobs programs should put heavy emphasis on promotion from within. To this end, opportunities for training for more skilled and better paying jobs should be provided for all staff members in the lower echelons and they should be encouraged to take advantage of them. The training should be done, to the extent practicable, by unemployed persons hired for that purpose. Where that is not possible, cooperation of the local school system, including the community colleges, should be sought. The budgets of the programs should include reasonable amounts to cover training fees in cases where outside facilities must be used for training.

II

Estimating Public Job Creation Possibilities

by Leonard Hausman, Barry L. Friedman,
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The present paper represents an initial attempt to identify some of the jobs that could be created and performed in a public employment program. Part I first discusses some important issues in establishing a public employment program and then reviews a number of sectors and ways in which new jobs can be created. Part 2 singles out two sectors--housing rehabilitation and social services--for a detailed examination of employment opportunities, including a review of the kinds of jobs potentially available and estimates of the number of jobs that can be generated through a public employment program. The analytical procedures followed in Part 2 can be applied to other problem areas as well in drawing a broader picture of job-creating potential.

The Design and Scope of a Public Employment Program

Among the many general issues involved in designing a program of job creation, four appear to be fundamental. First, the desired scale of the program must be determined. In particular, it must be decided whether or not the program is to offer a guaranteed job to all. Second, if it is decided to limit the number of jobs, it must be decided which target populations are to receive the new employment opportunities. Third, the jobs offered under the program should be designed to suit the capabilities of the target populations and should have some social utility. Fourth, since many types of programs could produce suitable jobs, a selection must be made in terms of both the types of jobs to be created and the mechanisms used to provide those jobs. Each of these four areas will be discussed in turn below.

THE SCALE OF THE PROGRAM

A Guaranteed Job For All

A guaranteed job approach has received some political support in recent years, although a number of economists have raised questions about its effects on private-sector labor markets. If public jobs are offered at wages sufficient to attract the unemployed, these jobs may also attract some persons already employed in the private sector or else may drive up wages on less attractive private sector jobs. This problem is likely to be minor in times of recession, when employers tend to lay off workers anyway. However, as the economy approaches full employment, private-sector firms have to compete with the public sector for workers. The wage-and price-inflating pressures of the expansion would therefore set in sooner than they would in the absence of a guaranteed job program. In addition, to the extent that wages are driven up in some occupations, a number of businesses depending heavily on the appropriately-qualified workers might not be able to compete for their services. Little information is available on which to base an estimate of the quantitative importance of these effects; nevertheless, the risk of accelerated inflation, with its accompanying labor market distortions, would appear to be substantial under a guaranteed job program.

A Cyclically-Conditioned Program

It is possible to reduce the risks associated with a guaranteed-job approach by devising public employment programs that are more responsive to the business cycle. The risks are greatest in times of economic expansion and boom, since the public employment program is then competing with the growing private sector for both resources and labor. The inflationary impact of the program is then greater the more workers prefer to remain in the public employment jobs rather than switch to private jobs. Any public employment program that continues unabated during a period of economic expansion--as an attractive guaranteed job program would--endangers economic stability. The solution is obvious: the public employment program must contract during an economic expansion. A formula for conditioning the size of such a program on the state of the economy is necessarily complicated, but one problem in particular deserves attention: the need for public employment varies by locality. Therefore, the formula for the size of the program must be applied on a local basis.

Previous public employment programs have featured some sort of cyclical conditioning. In the Emergency Employment Act (EEA) program, for example, funding was to be cut back if unemployment fell below 4.5 percent. In a large-scale program, it would be particularly important to develop a suitable formula for cyclical conditioning, if undesired consequences are to be avoided.

TARGET POPULATIONS

Individuals to be covered by such a program might include those: (1) who are cyclically-unemployed, as a result of either general business cycles or cycles more specific to a particular industry or region; (2) who are displaced as a result of market shifts, technological changes, etc.; (3) who lack appropriate training; (4) who are especially handicapped and incapable of earning minimum wages; and (5) who are subject to discrimination in their search for employment. Those in categories (2) through (5) are sometimes identified as the "structurally unemployed." It is important to realize that, far from being static, these categories include an ever-changing client population.

Indeed, one major program goal would be to accelerate this turnover by encouraging the rapid movement of individuals out of publicly-funded positions and into regular jobs.

The distinction between cyclical and structural unemployment is useful primarily in deciding what kind of cyclical conditioning is appropriate for the program. For example, an effort concentrating exclusively on the long-term disadvantaged should be permanent, with relatively minor fluctuations in scale over the business cycle. On the other hand, a program directed at the cyclically-unemployed could be phased out completely during each upswing to eliminate inflationary pressures, and reintroduced only after the economy has begun a downswing. A program designed to serve both groups simultaneously would be cyclically-conditioned, but would continue in operation during the cyclical peak, even though on a reduced scale.

One group which might be targeted for special treatment consists of unemployed younger workers, particularly those from disadvantaged backgrounds. Although a certain amount of employment instability is typical of many younger workers, prolonged stretches of involuntary unemployment are likely to prove harmful to their long-term careers. Their early years in the labor force perform an important function in permitting the accumulation of human capital in the form of on-the-job training, and also in developing positive attitudes toward work. Labor market failure at this stage in a career may prevent the development of skills useful in future work and may create negative work attitudes--problems which may be most severe for those from disadvantaged backgrounds. A public employment program for these workers can provide needed job experience and, if it is combined with some training, can also provide the basis for successful entry into the private-sector labor market.

KINDS OF JOBS TO BE OFFERED

Job Needs of the Target Populations

The jobs offered should suit the qualifications of the target populations--i.e., jobs provided to low-skill workers should be within their grasp at the same time that skilled workers should benefit by being able to use their skills. Although we will not consider worker skills in any detail in this analysis, a couple of observations can be made concerning the match between skills and jobs.

First, the mix of skills among potential program participants is likely to differ according to time and place. It is probable, for example, that the kinds of workers available in a rural area will differ from those in an urban region, and that the mix will differ even among urban regions. Moreover, increasing numbers of skilled workers become unemployed as a cyclical downswing proceeds, while relatively few of the skilled are out of work at the cyclical peak (except perhaps for some technologically-displaced workers). These differences require flexibility in running the program. If appropriate mixes of jobs are to be offered at different times and in different localities, Federal guidelines must allow for considerable local differences. In addition, to the extent that the composition of the unemployed population changes over time, job offerings should be varied over the cycle. In particular, skilled offerings may need to expand in the downswing and contract in the upswing relative to the program as a whole, with the exact adjustment depending on local circumstances.

Second, the inclusion of skilled jobs among the program offerings not only may benefit the skilled individuals, but can increase the efficiency of the program. For example, housing rehabilitation efforts, which require some skilled workers, become feasible only to the extent that such workers are available among the unemployed. (Of course, not all workers employed at these jobs need be skilled. Unskilled workers can be used alongside the skilled for on-the-job training and apprenticeship.) It is likely that in other areas, too, the existence of unemployed skilled workers will provide a valuable resource to the program, both in organizing the work and in providing on-the-job training to unskilled workers employed on the same project.

The Social Utility of Job Offerings

The political acceptability of the program depends to a large extent on its social utility. In contrast to what is expected in the case of revenue-sharing programs, this does not necessarily mean that only the activities with highest social priorities would be undertaken. On the State level, for example, a revenue-sharing program would allow the State to proceed with the activity of highest priority among those not currently performed--but this activity might require the hiring of relatively few from the target population, or of only some kinds of skilled unemployed workers, with little impact on the others.

In contrast, employment program activities would be chosen primarily on the basis of their employment effects, judged not only in terms of the quantity of jobs created, but also (and perhaps more importantly) in terms of the capacity of the jobs to meet the different needs of the various target groups. The activities, of course, would come from a list of socially-useful projects, but would not come invariably from the top of the list.

A cautionary note should be sounded about the need to avoid undue substitution of program jobs and products for those which would ordinarily be provided through other means. Potential situations involving unfair competition with private sector firms can be minimized by proper guidelines and some process of adjudication. Job substitution of the type observed in some localities under the CETA and EEA programs presents a more difficult problem, however.

CHOICE OF PROGRAMS

The postwar history of Federal training and job creation activities has been characterized by a unitary program approach. Starting with Area Redevelopment Act (ARA) programs in the early 1960's, and continuing through more recent CETA efforts, employment and training policy has tended to place its emphasis upon a single approach, or at best on a narrow range of program choices. However, a variety of programs may be needed if the targeted population is to be served effectively.

Historically, a number of models have been developed which could be applied to the concepts of supported work and/or the government-as-employer-of-last-resort. Usually these have been ad hoc attempts to deal with specific problems, such as CCC and WPA during the depression years, or the needs of special target groups, such as the handicapped in sheltered workshops and the structurally unemployed under the initial employment and training programs. The primary goal of all these efforts has been some combination of income for the individual, a meaningful involvement with work, and a socially-useful or worthwhile output. A secondary consideration has been the administrative cost of these activities. In most instances there has been (and will continue to be) a tendency to minimize non-client costs, although it is important to realize that a more correct target for minimization is the economic cost to society. If valuable economic goods and services are produced, net social cost may be minimized even with large number of non-clients.

A number of job-creating options will now be reviewed briefly. (In Part 2, the areas of housing rehabilitation and social services will be examined in more detail in order to estimate the numbers of job opportunities in those two areas.) The job options to be discussed here may be grouped into several principal combinations: employment quotas, new industries, services, business partnerships, and sheltered workshops.

Employment Quotas

Almost any enterprise or activity can employ additional workers effectively. This is especially true of those non-profit and governmental enterprises which do not directly sell their products at market clearing prices. Thus, one of the simplest options would be to require each employer to add a given number of certified employees to his or her existing work force. (This approach is used in some foreign countries as a means of providing jobs for physically handicapped workers.) At a 7 percent rate of unemployment, 93 percent of the labor force is employed. If each employer added one employee for every 25 already on the payroll, the jobless rate would drop to the target of 3 percent. Such an approach might be a particularly useful way to deal with cyclical downturns: some employees would be shifted to a certified category, rather than laid off. The program would have to involve a variety of tax and subsidy arrangements, since firms would vary in their capacity to absorb certified workers usefully: some firms would add more than the listed numbers, and others would pay higher taxes.

New Industries

One way to minimize displacement and substitution problems would be to concentrate on job creation in new industrial and service areas. For example, the American space program had a very specific goal and job creation was not an explicit part of it. Nevertheless, it acted directly and indirectly to provide a large number of jobs in a new sector.[1] Other new or compelling national priorities could be met in conjunction with meeting job goals--among them environmental renewal, urban revitalization, and technological innovation.

The Environment: As an example, Boston Harbor is a great, but poorly utilized, natural resource. Its revitalization, for which some plans have been proposed, would cost millions, but would employ large numbers of people. A similar approach to major waterways in both urban and rural areas would have a similar employment potential. The accomplishment of these major projects would also provide a very visible and tangible monument to the job creation legislation.

Urban Renewal: The rehabilitation of urban areas and their housing units can be broken down into many basic tasks and thus provide work for individuals with limited skills. Rehabilitation would also provide an excellent setting for a number of training programs for young people, especially those who live in or near the affected areas. Once rehabilitated, moreover, many of these areas would need continuing social and protective services to allow the rebuilding to have a long term viability, and these services would provide additional employment opportunities. (Rehabilitation is discussed in more detail in Part 2.)

Technological Innovation: Recent reports have suggested a loss of U.S. technological leadership. To some degree, this may reflect cutbacks in research activity, but it is also associated with a decline in the supply of venture capital. In return for shares of stock, some funds under job legislation could be allocated to small companies with promising new technological ideas, provided that the companies would meet certain employment goals.

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[1] For more detail on employment developments in the aerospace industry, see the Manpower Report of the President, 1965 (pp. 66-77), 1967 (pp. 30-31, & 58), 1971 (pp. 13 & 18), 1972 (p. 13).

Assistance in the diffusion of new technology also holds some promise of creating employment. Current technology in solar energy, while capable of improvement, is sufficiently advanced to allow for significant energy saving by installing units in existing buildings. A government program aimed at encouraging and subsidizing the installation of solar energy units could provide a variety of training and employment opportunities.

Services

Social: There are a number of social services which are now provided at levels which meet only a fraction of the total need--for example, meals-on-wheels and transportation services for the elderly, remedial assistance for school children, and day care. An expansion of these activities would provide a number of opportunities for certified employment and training that would be useful in seeking later employment in the private sector. This option has a number of advantages, among which are geographical dispersion and low capital requirements per worker. A major difficulty lies in the possibility that certified workers would be substituted for regular public sector employees, a process which has been observed under EEA and CETA. (This approach is also discussed in more detail in Part 2.)

Cultural: Among the more enduring monuments to this country's experience with job creation in the 1930's are the artistic creations written, painted and composed under WPA and other programs. In the 1970's, job creation which supported artistic groups could serve the humanities while providing additional jobs. One difficulty with this approach is the tendency for such funds to serve to create rents for current employees and to substitute for other support funds.

Business Partnerships

Two forms of business partnership hold some promise of being effective alternatives to direct government operation of employment programs. One involves the formation of new enterprises to organize job creating activities, including those listed above, as well as the operation of recreational areas, servicing of State vehicles, deleading of houses, etc.

A second form of partnership would involve sub-contract or joint-venture arrangements with established enterprises. Such an approach would tend to minimize capital and administrative costs while reducing the risk of failure and start-up time.

Sheltered Workshops

Many of those who would be employed under job creation legislation could pass through sheltered workshops on their way to regular employment. Such workers could be given certified employment as a way of responding to shifts in the economy or in order to meet their need for a defined amount of training. Other employees, however, would never be able to meet the market test, and would always be in a sheltered or supported work situation.

Historically, a number of well-developed models of supported work have produced output which is very simple in terms of labor content. In most cases, this concept has been applied only to the most severely disadvantaged, and most such workshops have been operated in conjunction with welfare agencies. The approach probably needs to be expanded to include some marginally-handicapped individuals who can benefit from being in sheltered workshop situations over the long pull. It also would be useful if these workshops could operate in conjunction with individuals employed in a more normal manner.

EVALUATING PROGRAM COST

With the exception of the employment quota and some non-complex social services, all of the program approaches listed above would require the employment of some regular workers as well as the certified employees. The exact numerical relationship between regular and certified employees would depend upon the specific output which is to be produced and the productive process which is involved. Yet it must be remembered that the regularly-funded jobs also contribute toward the goal of full employment. The use of such personnel increases the total cost of the program, though not necessarily the economic and social cost to society. Direct program costs, of course, include payments to the certified employees, to the regular employees, and to the suppliers of necessary equipment and materials. However, legislative appropriations could be smaller than direct program costs for two reasons: first, any sales revenue from the output can be subtracted from cost; second, welfare payments (general relief, unemployment compensation, etc.,) can be diverted to the employment program, offsetting some of the direct program costs.

Evaluating Job Potential in Particular Product Areas

This part of the analysis provides detailed information on product areas in which employment could be created, as well as on the number of jobs that could be generated. The procedure in each case is to discuss: (1) the nature and extent of the "need" for the product; (2) how production of the particular item would generate jobs that would match the skills of the persons who would comprise the target groups for the program; and (3) the employment-creating effects of particular levels of expenditures. The intent is to offer illustrations of the process which program planners would follow in estimating the nature and number of jobs that could be created through a publicly financed employment program. If discussion is limited to two broad product areas, housing rehabilitation and social services, it is because of the limited resources available to the authors, rather than because they believe that jobs can be created only in a limited number of spheres. Estimates could be refined in each of the two areas and extended to other areas.

HOUSING REHABILITATION

The Need for the Product

The abandonment by property owners of structurally-sound housing is a significant problem common to many American cities. 2/ Housing abandonment is the last stage of a disinvestment process that often occurs when neighborhoods undergo racial and economic transition. As a result, blocks of sound structures stand vacant in many cities at the same time that overall vacancy rates are very low and rents in the general housing stock are rising rapidly. Even so, public intervention often appears only marginally-justifiable from either an economic or political perspective when viewed solely in terms of housing objectives. When anti-poverty and employment objectives are considered, as well as housing needs, public intervention can be justified far more readily.

Disinvestment and the resulting deterioration of housing stock may commence when it would be economically sound from a social point of view to continue investing. For example, the process may begin when owners learn of racial transition in their neighborhoods. Fearing

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2/ The discussion in this section is based largely on The National Survey of Housing Abandonment (New York: National Urban League, Center for Community Change, 1971).

decline in the value of their property, they "disinvest" by not maintening its normal state of repair. Simultaneously or alternatively, financial institutions, also fearing neighborhood decline as a consequence of racial and economic change, may induce disinvestment by refusing to make loans for property improvement or mortage refinancing, a practice commonly referred to as "redlining." Had each owner maintained his or her property, it is likely in some cases that a normal rate of return would have accrued, with no necessary deterioration process. Once perceived as a probability, however, a feared decline often acts as a self-fulfilling prophecy. Deterioration and abandonment can be virulently contagious, leading even to the decline of adjoining neighborhoods possessing an economically viable, structurally sound housing stock. Many units are now in a process of decay leading to abandonment which can drag out over a period of three to 10 years. A housing rehabilitation program undoubtedly should be directed at houses still in the process of disinvestment and those finally abandoned.

Although some housing units deteriorate because owners or financial institutions have misjudged economic or social developments, others decay because they are occupied by poorer people paying lower rents. Under these circumstances, some units cannot be maintained at levels which satisfy local housing codes while providing landlords with a satisfactory rate of return. Rental defaults and the loss of higher-income tenants can overwhelm many a landlord faced simultaneously with rising property taxes, vandalism, and other costs. Furthermore, many cities have experienced a growth in the number of residents who are "housing poor" according to the low-rent budget standards of the Bureau of Labor Statistics--that is, residents who spend more than 25 percent of their income on housing. Between 1960 and 1970, the number of families paying such rents grew 19 percent in Boston, 28 percent in Detroit, 30 percent in Newark, and 40 percent in Philadelphia. 3/ Disinvestment and deterioration resulting from both an uncertain future and currently unfavorable conditions are likely to be substantial in cities across the Midwest and Northeast.

Estimating the actual need for rehabilitation on a national basis involves establishing a definition and standard of physical inadequacy and then counting housing units in various stages of disrepair in each

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3/ Arthur Solomon, Housing The Urban Poor: A Critical Evaluation of Federal Housing Policy, (Cambridge, Mass: Joint Center for Urban Studies, Harvard/MIT, 1974), p. 12.

locality. A recent study defined a physically inadequate unit as "one that lacks complete indoor plumbing facilities, or that has all plumbing but the heating is inadequate for the local climate, or that has all plumbing and adequate heating but is in a dilapidated condition." 4/ By this definition, 6.9 million households were living in units in need of repair in 1970. Regionally, 1.4 million of these were in the Northeast, 2.2 million in the North Central, 2.4 million in the South, and .9 million in the West. Two-fifths of all physically inadequate units were in metropolitan, and three-fifths in non-metropolitan, areas. This study also provides estimates broken down for each of 243 metropolitan areas, which make two points: first, there is wide variation from place to place in the proportion of households living in physically inadequate units (see table 1); second, the nature of housing problems that are defined as physical inadequacies also varies greatly by locality (see table 2). Together, they indicate that a housing rehabilitation program should vary considerably in magnitude from one area to the next.

Besides estimating the number of physically-inadequate units at a given point in time, the study projected changes in the stock of unsatisfactory housing between 1970 and 1980. Based on a slightly more restrictive definition of physical inadequacy (inadequately heated units are excluded, for the most part), the projections indicate that, although the substandard housing stock has declined dramatically over time, it should stabilize at roughly five million units between 1970 and 1980. (See Figure 1.) The reason for this stabilization is the growth in the number of deteriorating dilapidated units. In the period 1950-1960, the number of standard units undergoing deterioration was just under one million, while it will be slightly more than double this figure in the period 1970-80. Deterioration of standard units is concentrated largely in some urban areas. As Kristof notes, however, these estimates may be very low because of the contagious character of deterioration and abandonment. 5/

4/ David Birch, et al, America's Housing Needs: 1970 to 1980 (Cambridge, Mass.: Joint Center for Urban Studies, Harvard/MIT, December 1973), p. 4-3.

5/ Kristof is cited in ibid., pp. B13, 14.

TABLE 1. EXTENT OF PHYSICALLY INADEQUATE HOUSING, BY METROPOLITAN AREA, 1970

Metropolitan area	Total number of households	Percent of households in physically-inadequate units 1/
Anaheim/S.A./G.G., Calif.	436,120	2.4
Biloxi/Gulfport, Mississippi	37,531	8.2
Boise City, Idaho	35,834	17.3
Chicago, Illinois	182,399	13.3
Eugene, Oregon	68,257	25.3
Fort Worth, Texas	240,730	4.9
Laredo, Texas	17,867	20.5
New Bedford, Mass.	51,275	37.2
Newark, New Jersey	583,985	8.5
Tampa, St. Petersburg, Florida	370,051	6.4

1/ The definition of a physcially-inadequate unit is provided in the text.

SOURCE: David Birch, et al, America's Housing Needs: 1970 to 1980 (Cambridge, Mass: Joint Center for Urban Studies, Harvard/MIT, December 1973). pp. 4-17 to 4-26.

TABLE 2. COMPOSITION OF PHYSICALLY INADEQUATE HOUSING, BY METROPOLITAN AREA, 1970

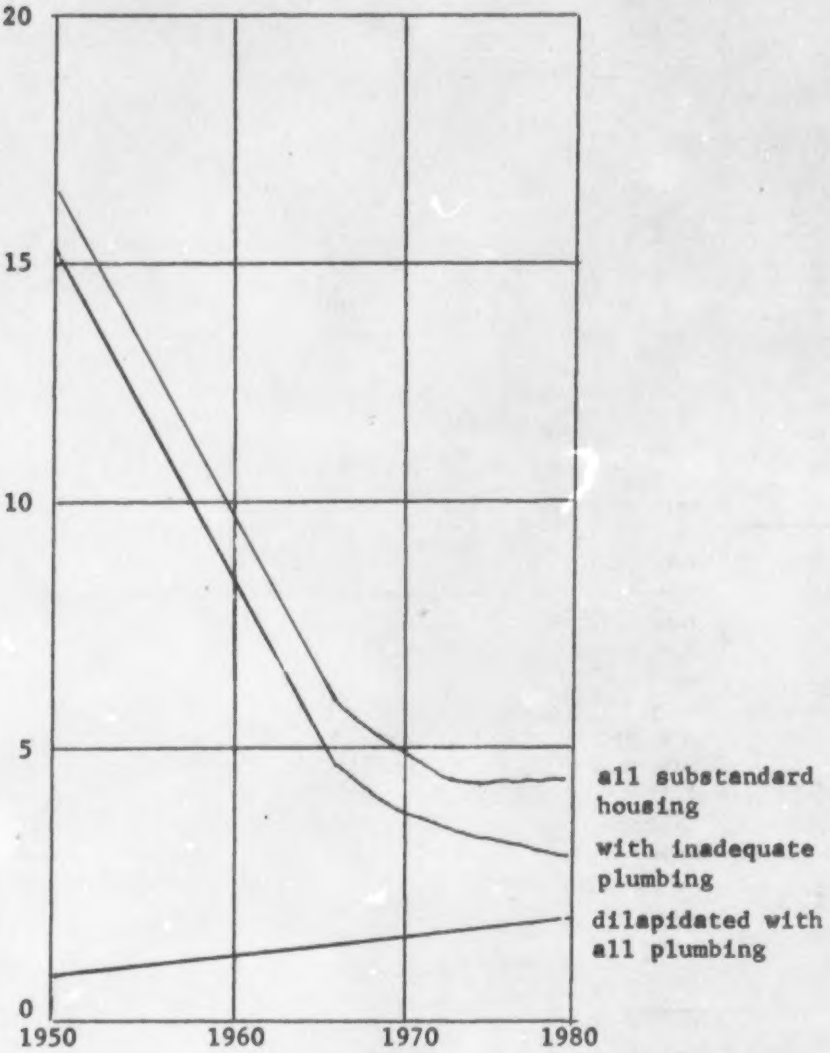
Metropolitan area	Total number of housing units	Percent with inadequate plumbing 1/	Percent dilapidated _/	Percent dilapidated, all plumbing 1/
Anaheim/S.A./G.G., Calif.	462,367	.6	2.3	2.1
Biloxi, Gulfport, Mississippi	41,548	5.1	5.6	4.0
Boise City, Idaho	37,124	1.8	2.5	1.9
Chicago, Illinois	2,288,867	2.7	3.7	2.8
Eugene, Oregon	71,058	1.8	3.0	2.4
Forth Worth, Texas	257,924	1.8	4.1	3.5
Laredo, Texas	19,314	18.1	9.9	4.0
New Bedford, Massachusetts	52,885	4.1	4.6	3.3
Newark, New Jersey	598,927	2.3	3.3	2.6
Tampa, St. Petersburg, Floria	393,836	3.2	4.7	3.6

1/ These categories are not mutually exclusive.

SOURCE: David Birch, et al, America's Housing Needs: 1970 to 1980, (Cambridge, Mass., December 1973), pp. 4-17 to 4-26.

FIGURE 1

Substandard Housing Stock, 1950-1980
(numbers in millions)



SOURCE: David Birch, et al, America's Housing Needs: 1970 to 1980 (Cambridge, Mass.: Joint Center for Urban Studies, Harvard/MIT, December 1973), pp. 4-17 to 4-26.

The Need for Employment Related to Housing Rehabilitation

If a housing rehabilitation program were to be undertaken primarily as a means of reducing unemployment, it would not be the first such effort in our history. Arthur Solomon writes:

> From its inception, the public housing program has been supported as much for the jobs it creates as for the shelter it provides. In fact, it was the employment effect of public housing which supplied the initial justification for federal involvement in low-income housing during the early 1930's. At that time Congress enacted the Emergency Relief and Construction Act and the National Industrial Recovery Act. . . to initiate residential construction projects as a means of relieving unemployment. The first major housing legislation, the National Housing Act of 1934, was passed not only to provide low-rent housing but also to create jobs. 6/

The employment need for a housing program is especially evident among two groups, construction workers and ghetto youth. Construction workers have been hit particularly hard by the last two recessions. Between 1969 and 1970, the unemployment rate in the construction industry jumped from 6.0 to 9.7 percent, an increase of over 60 percent. Since 1970, unemployment has remained at roughly the 10 percent level, the highest rate for any major industry group by at least 3 percentage points, or by more than 40 percent. (In some locations, the unemployment picture for construction workers is much more gloomy than the national averages would indicate.) Similarly, the unemployment rate for 18 and 19 year-old black and other minority men has been in the range of 19 to 27 percent since 1957; among minority women of similar age, the unemployment rate has been in the range of 22 to 39 percent since 1954. Few other demographic groups experience unemployment rates approaching these levels. 7/

6/ Solomon, pp. 114-15.

7/ U.S. Department of Labor, 1975 Manpower Report of the President (Washington: U.S. Government Printing Office, April 1975), Tables A-19 and A-22.

A housing rehabilitation program could employ both established construction workers and ghetto youth. Certainly, it should exclude neither. While political realities would not allow the exclusion of the former group, the same is not necessarily true of the latter. This is a service area in which both the cyclically-and the structurally-unemployed can be accommodated. A housing rehabilitation program can be operated to provide training for ghetto youth to move them permanently into higher-wage jobs. At the same time, there is no reason to fix ceiling wage rates or annual earnings levels in the program in such a way as to exclude regular union construction workers. Keyes has noted that housing rehabilitation, as opposed to new construction, lacks a sufficient number of standardized operations to transmit skills to trainees in optimal fashion. Imperfect as it is, however, he believes that a large-scale program would allow for skill development. 8/

The Employment Effects of a Housing Rehabilitation Program

In order to determine the employment effects of expenditures on rehabilitation, one first must examine the labor demands generated per unit of expenditure and then estimate the level of expenditures that reasonably could be attained. Multiplying the number of units of expenditures by the labor demands per unit yields an estimate of total labor demands generated by the program.

Solomon has prepared estimates for one city, shown here in table 3, of the work-hours of various kinds of labor demanded per thousand dollars of expenditures in an "extensive" housing rehabilitation effort. 9/ These labor demands are contrasted with those generated by a $1,000 expenditure on new construction in highrise buildings. (Labor demands generated by less than "extensive" rehabilitation are not shown here.) Also listed are the prevailing wage rates for the respective construction industry occupations in one particular location in 1970. From these are derived weighted mean wage rates paid to labor in rehabilitation and new construction. Although the focus here is on the employment effects of rehabilitation, some interesting points arise from a comparison of the alternative approaches to the provision of housing.

8/ Langley C. Keyes, Jr., The Boston Rehabilitation Program (Cambridge, Mass.: Joint Center for Urban Studies, Harvard/MIT, 1970), p. 161.

9/ The discussion here draws very liberally on Solomon's work, especially pp. 112-137.

TABLE 3. COMPARISON OF ON-SITE LABOR REQUIREMENTS BY CRAFT FOR EXTENSIVE REHABILITATION AND NEW CONSTRUCTION PER $1,000 CONSTRUCTION CONTRACT COST, BOSTON, 1970

Trade	Work-hours, rehabilitation	Work-hours, new construction	Prevailing hourly wage
Laborers/helpers tenders	25.4	22.9	5.00
Bricklayers	5.2	6.6	7.15
Carpenters	19.2	13.0	6.95
Ironworkers (ornamental structural, reinforcing)	1.4	3.6	7.45
Sheetmetal workers	-	0.6	7.75
Lathers	1.9	6.0	6.60
Tile setters	-	0.1	6.50
Plasterers	3.7	4.4	6.60
Roofers	1.4	0.5	6.30
Operating engineers	-	2.5	6.45
Painters	5.4	3.4	6.20
Floor layers	-	0.2	--
Plumbers	7.9	11.3	7.75
Electricians	3.7	5.1	7.50
Asbestos workers	-	0.6	6.35
Cement finishers	-	4.0	6.75
Elevator mechanics	-	0.8	7.25
	-	0.4	6.25
Field supervisors	2.3	2.2	7.20
Professional, technical, clerical	1.4	2.1	7.40
Truck drivers	0.6	0.6	5.15
Custodial workers	-	2.6	2.95
Other	0.9	2.4	6.65
Total	80.4	95.9	
Weighted Mean Wage	$6.37	$6.08	

SOURCE: This table combines information from two tables appearing in: Arthur P. Solomon, Housing the Urban Poor: A Critical Evaluation of Federal Housing Policy (Cambridge, Mass: Joint Center for Urban Studies, Harvard/MIT, 1974), pp. 118 and 136.

A first point of interest is that only 50 percent ($512) of $1,000 expended on rehabilitation would go to labor directly; the other half would be spent (in the first round of expenditures) on materials and other costs. In new construction, about 60 percent ($583 in this instance) would go to construction workers' wages directly. This difference arises from the fact that the construction of a housing shell is more labor-intensive than the preparation of its interior. Clearly, if employment were to be generated via this route, the Congress would have to allow money to be spent on materials and equipment. Recent public employment programs have prohibited such expenditures by State and local governments.

A second point is that rehabilitation involves relatively extensive use of unskilled and semi-skilled labor. Solomon's estimate is that one-third of the total on-site rehabilitation work (in Boston) is done by such labor, whereas less than one-fourth of new construction work falls to the unskilled and semi-skilled. This allocation would vary among localities as a function of wage rates, community pressures, and (very importantly) union rules, but the one-third/one-fourth contrast is indicative of the typical situation.

The same estimates show that a rehabilitation program would spend $169 per $1,000 of expenditures on unskilled and semi-skilled labor, in contrast to $134 per $1,000 in new construction. More modest forms of rehabilitation than the "extensive" variety require yet other mixes of labor, some of which are suggested in table 4, which indicates the labor requirements associated with selected small rehabilitative tasks.

Once it is recognized that there are varieties or levels of rehabilitation, crude estimates can be made of the employment impact of particular levels of expenditures. Information on the state of repair of the existing housing stock of the type presented in tables 1 and 2, can be joined with data on levels of rehabilitation, their costs, and their on-site labor requirements to arrive at the desired estimates.

Solomon distinguishes among three types of rehabilitation and notes their rough costs in one city at one point in time:

> Extensive Rehabilitation or Reconstruction - This level of rehabilitation involves the total gutting of a building, preserving only the envelope or exterior shell. The interior of the building is reconstructed by installing new partitions, plumbing, electrical systems, floors, and so on. The cost [In 1974] normally runs to over $10,000 per unit.

TABLE 4. TYPE OF RENOVATION AND REPAIRS NECESSARY TO CORRECT CODE DEFICIENCIES FOR LEASING EXISTING UNITS, BOSTON, 1970

Code violations	Repair Cost	On-Site Manpower Requirements
Holes, cracks in hall walls	$ 50	4 hours, plasterer
No wire latch over furnace	60	2 hours, plasterer
No heat or hot water (boiler)	600	20 hours, plumber/pipefitter
Stains on bedroom ceiling	40	3 hours, painter
Exterminate roaches	40	3 hours, exterminator
Replace hall railing	300	12 hours, carpenter
Clean, paint dwelling (2 bedrooms)	275	40 hours, painter
Replace defective bathroom radiator	75	3 hours, plumber
Furnace miswired, change thermostat	150	16 hours, electrician
Molding defect in dining room	65	4 hours, carpenter
Cover bathroom pipes with asbestos	70	4 hours, asbestos worker
Paint door jambs, trip, facing	20	2 hours, painter
Another means of egress needed	95	8 hours, carpenter
Replace pull-type switch in bathroom	100	6 hours, electrician
Wallpaper peeling, repaper	85	4 hours, painter/paperhanger
Fix gutter on front of building	50	4 hours, carpenter
Repair front porch cement baluster	75	4 hours, mason
Electric outlets needed, dining room	85	5 hours, electrician
Repair radiator pipe leak, dining room	25	2 hours, plumber
Replace four broken windows	45	2 hours, glazier
Repair loose hallway floor boards	50	4 hours, carpenter
Install screens, storm windows	260	18 hours, carpenter

SOURCE: Arthur Solomon, Housing the Urban Poor: A Critical Evaluation of Federal Housing Policy, (Cambridge, Mass: Joint Center for Urban Studies, Harvard/MIT, 1974), p. 12.

Moderate Rehabilitation or Modernization - Essentially, this level of rehabilitation involves the modernization of some or all of the mechanical subsystems: heating, plumbing, and/or electrical. The exterior structure, floor layout, and interior walls are preserved. Costs can range [In 1974] from $2,000 to $10,000 per unit.

Minimal Repair, Renovation or Maintenance - This type of rehabilitation is limited to minor repairs; cleaning the cellar, hallway, and yards; and plastering, painting and repapering walls and ceilings to improve their appearance. Little, if any, structural or mechanical work is involved. Usually this type of property maintenance costs less than $2,000 per unit. 10/

As shown in Figure 1, in the absence of any new public intervention, there will be an average of roughly 5 million "substandard" units in the housing stock each year between now and 1980. (A somewhat larger number of "physically inadequate" units exists, perhaps 5.5 million.) This number is the outcome of the flow of additions to, and subtractions from, the unsatisfactory housing stock that "normally" takes place as the result of deteriorations, demolitions, conversions, rehabilitations, etc. A rehabilitation program would therefore have to work on both the existing stock of 5.5 million units plus the annual normal inflow of roughly 200,000 deteriorating units. Such a program, spread out evenly over 10 years, would involve an average annual rehabilitation load of 1/10 (5,500,000) + 200,000 units, or 750,000 units. If, to use a crude example, one-third of these units fell into each of Solomon's three categories; and if expenditures on units in these categories, using Solomon's cost estimates, were to average, respectively, $10,000, $3,000, and $1,000, then aggregate expenditures per year conservatively would total $2.5 billion, $.75 billion, and $.25 billion in the three groups. This sums to $3.5 billion per year for each of 10 years. Using the data on labor requirements in table 3, roughly $1.75 billion of the $3.5 billion would go to cover on-site labor costs, $0.6 billion of which would go to unskilled and semi-skilled labor. Further, using the Boston manning requirements, $3.5 billion would buy 281,400,000 hours, or at 2,000 hours per work-year, 140,700 fulltime jobs per year. Again, one-third of these would go to the unskilled and semi-skilled. Simultaneously, of course, off-site jobs would be created too.

The crudeness of these estimates should be underscored. The level and composition of rehabilitation demand would have to be determined area by area, and labor requirements and wage rates would also vary by

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10/ Ibid, p. 122.

locality. Since the program would be cyclically-conditioned, with more of its resources brought to bear in bad economic times, the estimates of annual employment effects are only suggestive and, in the aggregate, probably conservative. For one thing, housing standards can always be redefined upwards. Were the Federal Government to combine a standard rehabilitation program with a massive home insulation effort, for example, potential expenditures and labor requirements could rise considerably. 11/

DE-INSTITUTIONALIZED, COMMUNITY-BASED SOCIAL SERVICES

The Need for the Services

In the last five years, public services (especially criminal justice, mental health, and social services) have changed their locus of operation from large centralized bureaucratic institutions to small community-based delivery programs. The movement towards community-based delivery has radically transformed one dimension of government operations, as Federal and State governments have stopped providing some services and started buying them. In a parallel transformation, community groups and local agencies have also changed from users and consumers to providers of services. The consequences for those employed in the delivery of public services can be suggested with a few examples.

According to State officials, Massachusetts currently has 1,500 contracts with about 400 different community agencies for the delivery of various social services. The Department of Youth Services, for instance, had virtually no purchase agreements in 1970, but now contracts for $7 million worth of services through more than 100 different purchase agreements. In 1975, such purchase agreements represented half the Department's budget, reflecting a fundamental transformation of its governmental function.

In another example, an alternative for nursing home care, the Massachusetts Executive Office of Elder Affairs has developed contracts with 18 new home-care corporations who, in turn, contract with 35 subcontractors to provide meals, transportation, and homemaker services for elderly persons in their homes. In New York, Governor Carey announced in 1975 that, as part of a plan to reduce from 2,900 to 250 the number of patients at the Willowbrook Development Center for the Mentally Retarded, the State would set up and contract with 200 new community residences.

11/ Among those recommending such a program is Tom Joe, "Double Social Utility: The Needy Serving Others in Need Through a Job Creation Strategy," (Washington: Levin and Association, Inc., mimeo, no date).

These examples show that States are moving away from the business of training or hiring psychiatric social workers, supervisors, and administrators for their large institutions, as community groups assume public responsibility for such activities. These groups are less bound by civil service requirements in determining their staff requirements and more responsive to community pressures in the hiring of personnel--two factors which should lead to the increased hiring of para-professionals in the delivery of services. This shift has been happening gradually, selectively, and unevenly among the States over the last five years--a piecemeal process which has produced failures and frustrations, but which nevertheless represents a revolution in the arrangement of public service.

The new hiring pattern is now sufficiently widespread to make it possible to say, not only that there is a new field of public service in community-based service delivery, but also that there are two new classes of public servants: contractors and deliverers. The bureaucrat no longer administers the program, but draws a contract for one instead. The skills he or she must possess are no longer strictly those of personnel management but, rather, the new skills of identifying potential providers, developing master contracts and amendments, contract management, and auditing for performance evaluation. While the new approach to service delivery has caused an upgrading of some jobs in standard governmental agencies, it may also have brought greater flexibility--and perhaps a lowering of formal educational requirements--for other types of work. For example, persons without much formal training may be acceptable as deliverers of a greater range of counseling services than was the case prior to de-institutionalization.

Publicly financed "social services" usually interest, and are directed at, the poor. Even when they go beyond counseling and protective services to include legal and manpower services, they are produced for those with low or moderate incomes. Thus, they are in-kind transfers, involving expenditures for redistributive purposes reflecting decisions made through the political system. In general, the level of redistributive expenditures falls far short of what the poor could absorb. (Indeed, the fiscal crises in many States have led to curtailments of these expenditures. 12/) Public employment in the social service area would allow an expansion of these services, which are useful to the poor, but which would not ordinarily be provided by the political process.

12/ This is discussed in some depth in: Barry L. Friedman and Leonard J. Hausman, "Welfare in Retreat: A Dilemma for Fiscal Federalism," unpublished paper, Brandeis University, September 1975.

An appropriate task here, where the purpose is to establish limits on the amount of work that could be done, is to make very rough judgements about how needs could be defined in several social service areas. To use one illustration, crude data are available on the number of people who could utilize a "personal care in the home" program. 13/ A low estimate of those not in institutions who could benefit from the service numbers 3,842,000, including 2,278,000 non-aged persons who are "severely limited functionally or dependent" and 1,564,000 aged persons largely confined to their homes. (See tables 5, 6, and 7.) After determining a level of service need for each of the persons who could benefit from home care, a rough notion of the universe of need can be obtained by multiplying persons by service needs.

A similar method of assessing potential needs can be used in other service areas as a first step in estimating the number of jobs that could be created in each sector. Since the number of service areas is large, the potential for increased expenditures could be shown to be substantial.

The Need for Employment Related to Community-Based Social Services

Community-based social services cover a broad range of activities and encompass many occupational classifications. Many jobs would be of a relatively unskilled helping nature, while others would involve counseling and the provision of information.

Persons in two target groups would be drawn upon extensively to fill jobs in this service area: female heads of families and youth, especially female youth in low-income areas. Female heads of families do work in the regular labor market, of course, but many find it difficult to undertake full-time, full-year jobs. In 1972, 58 percent of all female heads of families worked, but only 31 percent of those who had been employed worked full-time all year. In the low-income population alone, 38 percent of the female family heads worked during the year but only 7 percent worked full-time all year. 14/ Unless day care opportunities and personal preferences are altered dramatically, such women will continue to be interested in part-time and/or part-year

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13/ U.S. Congress, U.S. Senate Special Committee on Aging, "Alternatives to Nursing Home Care: A Proposal," prepared by the Levinson Gerontological Policy Institute of Brandeis University (Washington: U.S. Government Printing Office, October 1971), pp. 3-4.

14/ U.S. Department of Commerce, Bureau of the Census, Current Population Reports, Consumer Income: Characteristics of the Low Income Population, 1972, Series P-60, No. 91, December 1973, Table 30.

TABLE 5. TOTAL POPULATION POTENTIALLY ELIGIBLE FOR LONG-TERM PERSONAL CARE BY INSTITUTIONAL STATUS AND AGE GROUP, 1971

Institutional status	Total	Ages 18 to 64	Age 65 and over
Not in institutions:			
Low estimate	3,842,000	2,278,000	1,564,000
High estimate	7,805,000	5,499,000	2,306,000
Now in institutions:			
Low estimate	124,200	6,600	117,600
High estimate	248,500	13,200	235,300

SOURCE: U.S. Congress, U.S. Senate Special Committee on Aging, "Alternatives to Nursing Home Care: A Proposal," prepared by the Levinson Gerontological Policy Institute of Brandeis University (Washington: U.S. Government Printing Office, October 1971), p. 3.

TABLE 6. NONINSTITUTIONALIZED PERSONS WHO ARE SEVERELY DISABLED AND FUNCTIONALLY LIMITED OR DEPENDENT, BY SEX AND AGE, 1966

/In thousands/

Age and sex	All	Mental	All except mental	Severely disabled	Severely limited functionally or dependent
BOTH SEXES					
Total, aged 18 to 64	19,753	1,101	16,652	5,499	2,278
18 to 44	8,562	577	5,985	1,555	611
45 to 54	5,072	268	4,804	1,712	563
55 to 64	6,119	256	5,863	2,232	1,071
MEN					
Total, aged 18 to 64	8,430	463	7,967	2,386	1,019
18 to 44	3,060	238	2,822	778	302
45 to 54	2,456	110	2,346	778	272
55 to 64	2,914	115	2,799	830	445
WOMEN					
Total, aged 18 to 64	9,323	638	8,685	3,113	1,259
18 to 44	3,502	339	3,163	777	339
45 to 54	2,616	158	2,458	934	291
55 to 64	3,205	141	3,064	1,402	629

SOURCE: U.S. Congress, U.S. Senate Special Committee on Aging, "Alternatives to Nursing Home Care: A Proposal," prepared by the Levinson Gerontological Institute of Brandeis University (Washington: U.S. Government Printing Office, October 1971), p. 3

TABLE 7. ESTIMATES OF THE NONINSTITUTIONAL AGED WHO COULD MAKE USE OF HOME HELP BENEFITS

Condition	Both sexes	Men	Women
Estimate 1			
Total aged, 1966	17,723	7,727	9,996
No chronic conditions	2,553	1,208	1,345
With chronic conditions	15,170	6,519	8,651
No mobility limitation	11,852	5,164	6,688
Some limitations on mobility	3,318	1,355	1,963
Some trouble getting around	1,361	570	791
Need help	1,114	468	646
Confined to home	843	317	526
Total needing help or confined to home	1,957	785	1,172
Having nervous or mental problems	151	70	81
Potentially eligible for home aid program, 1966	1,806	715	1,091
Estimate 2			
Population aged 65 and over unable to carry on major activity	2,441	1,672	769
Estimated as having nervous or mental problems	400	300	100
Potentially eligible population, 1966	2,041	1,372	669
Adjusted eligible population, 1970	2,306	1,550	756
Estimate 3: Best estimate likely to use help	1,564	808	756

SOURCE: U.S. Congress, U.S. Senate Special Committee on Aging, "Alternatives to Nursing Home Care: A Proposal," prepared by the Levinson Gerontological Policy Institute of Brandeis University (Washington: U.S. Government Printing Office, October 1971), p. 4.

work. Female heads of families need flexible work arrangements, and jobs in many of these social services could offer them exactly that. Wives, too, if they have children, would be interested in such opportunities, but their financial needs generally are not as great as that of the female heads. For the members of either group, counseling and home helping would offer flexible opportunities to do meaningful work that is not too demanding in terms of skill requirements.

Female youth, among whom unemployment is so dramatically and persistently high, would also have substantial opportunities in this service area. For them, it is especially important to make the work dignifying and rewarding. It is also essential here, as in the housing rehabilitation program, to build a training component into the employment program. This has been done extensively for home helpers in Western Europe. Germany provides the longest training--one year in school and one year in supervised institutional assignments. By contrast, and of much greater relevance here, England provides two to three weeks of training, plus short-term institutes and on-the-job training. These programs have been carefully developed and detailed descriptions of them are readily available. 15/ The development of skills and dignity should help to stabilize employment in this area, a vital necessity for teenage females in low-income areas. Lastly, it should be noted that, to the extent that the target employment groups live near the persons to be provided services, the former are more likely to be given the jobs and also are more likely to accept them.

The Employment Effects of a Community-Based Social Services Program

A procedure similar to that followed in the housing rehabilitation case can be followed here in estimating the employment effects of increased expenditures on community-based social services. First, the labor demands per unit of expenditure need to be determined. Then, the level of expenditures that could be reached in view of aggregate service needs must be estimated.

To assist us in the first step, table 8 lists the workforce requirements per $1,000 of expenditures for illustrative social services, home care for disabled and aged persons and group day care for children. Again, the services are selected because they tend to be

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15/ International Federation on Aging, Home Help Services for the Aging Around the World, (Washington, D.C. no date, pp. 5-6).

TABLE 8. WORKFORCE REQUIREMENTS FOR HOMEMAKERS AND GROUP DAY CARE SERVICES PER $1,000 OF EXPENDITURES IN THE BOSTON AREA, 1975

Service	Work-hour requirements	Hourly wage
Homemaker Services		
Homemaker	212.0	$2.50
Social Work Assoc.	24.4	4.51
Administrators	2.9	7.93
Group Day Care Services		
Administrators	18.3	6.35
Professional consultants	5.7	4.70
Secretarial	13.6	3.06
Social Workers	9.8	5.61
Neighborhood Social Workers	4.5	2.89
Nutritionists	5.1	4.00
Teachers	48.1	3.84
Teaching Assistants	77.4	2.73
Custodial	10.1	2.51
Cooks	11.9	2.56
Cook's Helpers	19.8	1.54
Household Helpers	10.2	1.71

SOURCE: These data are derived from "purchase of service" contracts between the Massachusetts Department of Public Welfare and two private organizations.

labor-intensive, employing in particular large numbers of relatively unskilled people. Aggregate need for them could be substantial, and the fact they would be directed at low-income consumers would increase the likelihood that low-income persons would be employed in delivering them. The structure of costs and employment for particular services would vary with labor supplied and with wage rates from one community to another. In addition, the technology used in the delivery of these services could vary among organizations and places as well as over time. Nevertheless, these illustrations can be of assistance in obtaining crude estimates of total employment that could be generated in each service area.

In the homemaker services program, which involves such personal services as cooking and counseling, 64 percent of total costs are for labor. Moreover, 53 percent of total costs and 82 percent of labor costs go to cover the wages of relatively unskilled people. Not shown in table 8 is information indicating that this particular program in the Boston area cost $33,000 for one year and provided 7,000 hours of home counseling and domestic service to disabled and elderly persons. This means that the program served an average of 30 persons for 1 hour per day for 260 days (for 30 x 1 x 260 = 7,800 hours). In table 5, we saw that perhaps 3.8 million persons could benefit from some personal care in the home. If an average per day of 2.0 million such persons were to be offered such services, the effort would require 520 million hours (= 2.0 x 260) of home service annually. Were one simply to replicate the Boston homemakers program to provide the 520 million annual hours, the annual cost would be $2.5 billion (= 520,000,000/7000 x $33,000). The program could employ about 520,000 persons for 1,000 hours during the year or 260,000 persons for 2,000 hours during the year).

This estimate of potential employment in home care is roughly consistent with estimates that could be derived in alternative ways. In England, for example, a study of social services found that 1,600 home helpers were effectively employed in servicing an area with a total population of 900,000. 16/ Assuming that this population has the same proportions of disabled and elderly people as does the U.S. population, a similar program for the U.S. would require 373,333 home helpers (= 210,000,000/900,000 x 1,600). The British example involves using one home care aide for each 562 persons in the general population. Using a lower ratio of home care aides to population, but being

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16/ Robert Morris, Rapporteur, Toward a Caring Society (New York: Columbia University School of Social Work, 1974), p. 19.

concerned with their geographical distribution, an alternative estimate for this country is that 300,000 homemaker-home health aides are needed--an increase of 270,000 over the number currently employed. 17/

A last means of determining labor requirements for a home care program is suggested by the data in tables 9 and 10, which provide information on the home care needs of 100 disabled persons just released from an institutional rehabilitation program. In the first week after their release, 69 of the 100 persons required "activities of daily living" services, averaging (among the 69) 8.4 hours during the week (see table 9). In that same first week, 81 of the 100 persons required 12.2 hours of housework services (see table 10). Needs changed over time, however. In weeks 23 and 24 following release, only 62 persons required any services and, of these, 40 required "activities of daily living" and 49 required "housework" services.

A second social service whose expansion could be considered is day care. For the group day care program shown in table 8, labor costs roughly are three-fourths of total costs and labor requirements are spread over a broad range of occupational groups. Here again, it is important to note that day care can be produced in a variety of ways. One alternative is day care in homes for small groups of children. The Massachusetts Department of Public Welfare also purchases this type of day care. It, too, is labor intensive and would employ a higher percentage of unskilled persons than would the type of program shown in table 8, which served 400 children all day for one year and cost $1.1 million, an average cost of $2,800 per child.

What would be the cost and the labor demands associated with a large day care program? According to the 1973 AFDC Study done by the Department of Health, Education and Welfare's Social and Rehabilitation Service, there were roughly 1.4 million children between the ages of 3 and 5 years on AFDC at any time during that year. 18/ Suppose a program were developed to put half of all such AFDC children in the

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17/ U.S. Congress, U.S. Senate Special Committee on Aging, "Home Health Services in the United States: A Working Paper on Current Status," July 1973, pp. 17 and 20. Yet other estimates can be found in: L.G. Branch and F.J. Fowler, Jr., "The Health Care Needs of the Elderly and Chronically Disabled in Massachusetts--Boston," March 1975; and Robert Morris and Elizabeth Harris, "Home Health Services in Massachusetts, 1971: Their Role in Care of the Long Term Sick," American Journal of Public Health, vol. 62, No. 8, August 1972, pp. 1088-1093.

18/ U.S. Department of Health, Education and Welfare, Social and Rehabilitation Service, National Center for Social Statistics, Findings of the 1973 AFDC Study: Demographic and Program Characteristics, Table Table 21.

TABLE 9. ACTIVITIES OF DAILY LIVING SERVICE UTILIZATION BY PERSONS RELEASED FROM AN INSTITUTIONAL REHABILITATION PROGRAM DURING THE 24-WEEK FOLLOW-UP PERIOD

Weeks following release	Total	Bathing	Dressing	Stairs	Walking	Transfer	Toilet	Feeding
Wks 1-2 (N=100)	69	51	26	21	25	20	22	10
Hours/wk	8.4	2.8	3.8	1.2	3.9	2.4	3.5	9.2
Wks 11-12 (N=83)	48	31	12	15	21	14	16	33
Hours/wk	6.4	2.5	3.4	1.0	4.3	1.7	2.6	6.0
Wks 23-24 (N=62)	40	28	9	12	18	12	12	3
Hours/wk	5.4	2.1	2.9	1.1	3.9	0.7	1.9	6.0

TABLE 10. HOUSEWORK SERVICES UTILIZATION BY PERSONS RELEASED FROM AN INSTITUTIONAL REHABILITATION PROGRAM DURING THE 24-WEEK FOLLOW-UP PERIOD

Weeks following release	Total	Light Housecleaning	Heavy Housecleaning	Laundry	Cooking	Shopping	Sewing
Weeks 1-2	81	56	36	58	64	45	1
Hours/wk (N=100)	12.2	5.7	1.6	1.4	8.1	1.1	0.2
Weeks 11-12 (N=83)	67	41	26	46	47	43	1
Hours/wk	10.6	4.5	1.6	1.1	8.3	1.1	0.2
Weeks 23-24 (N=62)	49	29	18	32	32	28	1
Hours/wk	11.6	6.7	1.5	1.3	8.6	1.3	0.2

SOURCE: These tab[illegible] are extracted from two tables appearing in: Gerald M. Eggert, et al, "Community [illegible]ed Maintenance Care for the Long-Term Patient," unpublished paper Brandeis University, January 1975, Tables III-3 and III-5.

type of day care under discussion here. Such a program would cost $1.96 billion and create roughly 215,000 full-time jobs annually. Those jobs would be distributed across occupational groups in proportion to the labor requirements per $1,000 of expenditures indicated in table 8. Thus, for example, roughly one-third of the jobs could go to teaching assistants and just under one-fourth would go to regular teachers.

If other AFDC children were placed in home day care programs, still more jobs could be created in this area. A home care component in the day care program ought to receive substantial attention for two reasons: one is that many mothers prefer the more informal setting for their children; a second is that home care would probably cost far less than $2,800 per child.

III

Job Creation Projects that Meet Local, Regional, and National Needs

by Peter Kobrak

Remarkably little is known about what the majority of employed Americans think that the Federal government should do for the unemployed. Recurring fears of "big government" and concern that job creation would be more expensive than the perpetuation of a jerry-built income maintenance system have apparently cooled the ardor of some welfare critics, but the issue remains largely unjoined--partly because the proposals for job creation on a large scale have remained "back-of-the-envelope proposals" and partly because large-scale job creation does not excite widespread political interest. The lack of excitement over the accomplishments of programs initiated under the Emergency Employment Act of 1971 (EEA) and of the Comprehensive Employment and Training Act of 1973 (CETA) reflect not only the relatively small size of these undertakings but also a similar lack of enthusiasm for jobs that must be invented and that are beyond the current and planned personnel requirements of the public and private sectors.

Job creation projects must demonstrate that they can cope effectively with palpable needs--that they are not merely new versions of "happy pappy" programs conjured up on occasions of high unemployment to rationalize welfare in a more palatable form. It is the contention of this essay that significant local, regional, and national needs exist that could be met through Federal funding of carefully-defined slots and projects. The available evidence in a number of important fields does justify further, more detailed examination of the advisability and feasibility of a redesigned and significantly expanded national job creation program.

Promotion of Economic Development Through Investment of Human Capital

The job creation projects that deserve the highest priority in the remaining years of this decade are those that promote economic development in a particular locality or region. Such projects would meet a need that the recession has highlighted throughout the country, and by generating present or future income, would help to refute the "make work" stigma of Federally-funded positions.

Federal efforts at economic development during the last 15 years, have yielded uncertain results, however, as well as a literature that is long on critical analysis and short on recommendations. This relative lack of success is presumably the result of the vast disparity between, on the one hand, the scope of our urban and rural economic challenges and, on the other hand, the limited knowledge and resources that we have brought to bear on the problems of those areas. The pessimism of many liberal economists that such economic reform can truly be compatible with the continuing domination of "the unseen hand" is perhaps most poignantly reflected in the writings of a next generation of radical economists, whose underlying premise is that the increasing number of unemployed and underemployed cannot be served through the capitalist system. Whatever the merits of that argument, a job creation stimulus directed at economic development seems to be an almost-inevitable stage in the evolution of our mixed economy. Just as the National Alliance of Businessmen (NAB) was necessary to determine the potential of job creation within the private sector, so efforts must now be made to dovetail Federally-administered projects with economic development. The following proposals do not feature large-scale recommendations for sweeping urban and rural regional development--not because of disagreement with such approaches, but because of funding constraints and the belief that more small-scale successes must be achieved before it would be politically possible to undertake more ambitious ventures.

TYING HUMAN CAPITAL TO ECONOMIC DEVELOPMENT

Employment and training programs and economic development efforts have traditionally operated in separate spheres. This separation was encouraged by the primitive nature of available job vacancy data and by the unsophisticated boosterism that lies at the heart of most efforts by State and local administrative agencies to encourage industrial growth. In surveying State development agencies, Eichner thus concluded that they paid little attention to exploring how they might stimulate the location of new industry within their borders through manpower development efforts.[1] The key to the persistence of this condition is perhaps supplied by Tabb who identifies six major factors influencing industrial location: land costs, local tax policies, the location of the firm's markets, the transfer cost structure, the local labor market characteristics, and the possible external economics. "The final four," he concludes, "are beyond the direct reach of policy-makers."[2] Under pressure to produce results quickly, State development agency personnel have presumably ignored long-term solutions.

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[1] Alfred S. Eichner, State Development Agencies and Employment Expansion, Policy Papers in Human Resources and Industrial Relations, No. 19 (Ann Arbor, Mich., Institute of Labor and Industrial Relations, The University of Michigan--Wayne State University, 1970).

[2] William K. Tabb, The Political Economy of the Black Ghetto (New York: W.W. Norton and Co., 1970), p. 65.

Most economic development proposals continue to emphasize the provision of land and capital in various forms, but there is now a growing awareness that development of human capital also contributes to economic expansion and that the task of broadening and deepening the present and future labor supply is integrally related to economic well-being. South Carolina's Committee for Technical Education has long pioneered in this area,3/ and the hard-pressed New England States have begun to take heed.

Provision of job creation funds to appropriate State and local development agencies could appreciably expand these efforts. Upgrading the labor supply in this fashion would frequently require work experience as well as training--particularly where unemployment is most severe. For example, in Muskegon County, Michigan, where the unemployment rate is one of the highest in the country, manpower planners would like to give "exposure and experience" to their job applicants in "occupations which have growth potential within the context of Muskegon's emerging economy." Training projects could be developed involving occupations similar to those required for economic development efforts. The flexibility of such an arrangement would greatly increase the likelihood that individuals would complete more advanced training programs. Furthermore, thanks to the experience that they would gain either at the same time or after completion of the training, it would also increase the probability that the individual would be placed in the job for which he or she was trained.

Human capital can be tied to economic development at different skill levels of the work force. Eichner observes that State development agencies tend to take for granted that labor-surplus areas in their States will be able to meet corporate employment needs,4/ although such an assumption is clearly unwarranted at the higher skill levels. Governor William Milliken's Michigan Economic Action Council thus recommended in 1975 that Federal manpower training program funds be sought to teach the skills needed by craftworkers on power plant construction projects in order to preclude the possibility of labor shortages when construction does resume, and to provide unemployed workers with the opportunity to upgrade their skills.5/ The Council

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3/ Eichner, op.cit.

4/ Eichner, op.cit., p. 58.

5/ Michigan Economic Action Council, Toward Growth with Stability: Recommendations for Long-Term Action (Lansing, Mich., 1976).

also suggested that other such potential skill shortages be identified. But pinpointing precisely when these individuals would be needed remains beyond the state of the art. At the least, however, those individuals who have undergone extensive and expensive training could be utilized in job creation projects as leaders and effective "doers" rather than be forced to migrate elsewhere or take positions that are below their skill level.

At lower skill levels, such "stockpiling" cannot be justified economically, but job creation can be utilized in other ways. For example, Caplovitz found in his study of Harlem merchants that the work habits and lack of training of their employees were major deterrents of their success,[6] and the frequent advice that "hard-core" unemployed persons not be used in such establishments implies comparable experiences. Job creation programs in this case could concentrate on providing job experience combined with training designed to overcome absenteeism and turnover. The high quit rate in marginal enterprises would insure slots into which these individuals could be moved, and, at least in the case of black business proprietors working in inner city areas where this problem is prevalent, such a social investment could be justified. Inclusion of experience of an actual job should result in more favorable results than "employability training" alone has achieved, and its importance increases during slow economic periods when few on-the-job training positions can be developed. Interfacing public service employment and training with economic development projects would, in the short run, enhance the significance of the created position; in the long run, it would not merely provide an advantage in the competition among States for new or expanded industry but would constitute a rational social investment by raising the skill level, and thus the real resources, of a region.

JOB CREATION AND NONMARKET-BASED INNER CITY DEVELOPMENT

During the late 1960's, the Federal government undertook a series of programs designed to revive inner city areas through economic activity based on the profit motive. Government incentives intended to encourage white business proprietors to locate in urban poverty areas found few takers and seemed to justify Tabb's conclusion that such programs were "too ineffectual in countering basic discriminatory patterns in the labor market and too weak to overcome widespread poverty." [7] To the limited extent that Department of Commerce efforts to stimulate "black capitalism" have achieved success, this has generally occurred outside the inner city. After surveying these program results, Levitan, Mangum, and Taggart concluded that "programs that improve mobility are preferable to those that subsidize immobility (and that) it is, after all, the people of central cities who must be helped and not the central cities themselves."8/

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[6] David Caplovitz, The Merchants of Harlem: A Study of Small Business in a Black Community, Sage Library of Social Research Series, vol. 1 (Beverly Hills, Calif., Sage Publications, 1973).

[7] Tabb, op.cit., p. 79.

However, the economic hard times of the 1970's have made it clear that many never achieve mobility, and their fate is increasingly threatened by the deterioration of the central cities as a whole. The flight from the cities of companies and skilled personnel continues, and if Eugene Foley's urban "Marshall Plan" or Spring's "truly serious regional economic development"9/ are not imminent, can job creation at least contribute to an eventual upturn in the lives of inner city dwellers?

Continuing deterioration has resulted in several attitudinal changes that may be significant in answering this question. First, it is now rare for a corporate executive to argue that the profit drive will propel those in the ghettoes out of poverty. This increased understanding of the problem may open the way to forms of governmental intervention formerly deemed unacceptable by the private sector. Second, the creation of economic entities designed to make jobs and needed products, even if they do not make money, are acceptable to some of the radical economists and militant blacks who criticized corporate inner city proposals on the grounds that they were "ripoffs." Bluestone, Harrison, Tabb, and others have argued that community development corporations may not be economically viable, but can provide valuable job experience and the basis for eventual social and political organization of far greater significance. Third, the emergence of a national quasi-income maintenance system in the form of unemployment compensation, welfare, and other benefits has created a new standard against which the acceptability of job creation can be measured. Projects hitherto unacceptable on the grounds that they are unprofitable are viewed in a different light if unproductive income maintenance is the alternative.

8/ Sar A. Levitan, Garth L. Mangum, and Robert Taggart III, Economic Opportunity in the Ghetto: The Partnership of Government and Business, Policy Studies in Employment and Welfare, No. 3 (Baltimore, John Hopkins Press, 1970).

9/ Alan Gartner, Russell A. Nixon, and Frank Riessman, eds., Public Service Employment: An Analysis of its History Problems and Prospects (New York, Praeger Publishers, 1973), p. 163.

LINKING A "JOB CREATION COMPONENT" TO BROADER VENTURES

While experience with economic development is limited, Federal, State, and local governments are funding a steadily increasing number of planning ventures. The Appalachian Regional Commission, the Title V (EDA) Commissions for Regional Economic Development, the 1974 expansion of EDA's Title IX jurisdiction and subsequent passage of Title X, and the activities of the Community Services Administration together constitute a significant Federal presence, and are now paralleled by the activities of a growing number of State and local bodies. Such ventures have continued to expand even though 1974 testimony before the Public Works Subcommittee on Economic Development revealed considerable uncertainty about the ability of State and local government to identify future economic changes, predict unemployment, make plans and then take the steps needed to assist an area to adjust to alternative economic activities.[10]

Tom Hahn, the enterprising Executive Director of the Orleans Council of Social Agencies (OCCSA), has already shown what such resources can accomplish. Operating in a tri-county poverty area in Vermont's "Northeast Kingdom," Hahn has combined some of the above sources with Department of Labor experimentation and demonstration funds and grants from several other Federal agencies to undertake a number of economic development programs. OCCSA has bid for and bought scattered plots of land in a mixture of low-income and other income-level areas. It then uses CETA clients to construct homes that are sold to qualified and eligible low-income applicants for $16,500 to $17,500, at interest rates that may be as low as one and one half percent. (These homes must meet regulations set by the Farm Home Administration.) OCSA also operates a sawmill that harvests, processes, and finishes the lumber used in the home building project, and provides winter fuel and building materials at a modest price to disadvantaged and low income residents--using loggers, mill workers, and equipment operators paid and trained with CETA funds. Similarly a well-drilling operation sells water to disadvantaged persons in need of a new or better water supply.

During the summer of 1975, Professor Eli Ginzberg's Manpower Demonstration Research Corporation began a Federally funded "supported work program" in 13 locations to provide transitional jobs for ex-offenders, ex-drug addicts, and other hard-core unemployed persons. Local sponsoring agencies hired employees and contracted for work in housing repair and security, among other fields.

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[10] U.S. Congress. Senate Committee on Public Works. Public Works and Economic Development Act Amendments of 1965. Senate Report together with minority and additional views to accompany S3641, 93rd Cong., 2nd sess., 1974.

Hahn and Ginzberg are considerably more experienced and innovative than many project operators, but it should be noted that job creation, plus the other available funding, now allows the flexibility that such social planners need in order to tackle more promising projects. It is fashionable among social planners to discount what men like Hahn and Ginzberg can accomplish, on the grounds that government programs must operate on the basis of standard operating procedures rather than individual savvy. The argument has a certain appeal, but the flexibility obtained by dovetailing job creation projects with economic development plans might afford a training ground and a springboard for other social entrepreneurs.

RURAL AREA DEVELOPMENT

The works of Ray Marshall, Niles M. Hansen, and others[11] have documented the economic plight of rural areas so thoroughly that it seems unnecessary to restate here the need for, and limited impact of, the comparatively small existing programs. National willingness to support economic development in rural poverty areas is symbolized by the high priority assigned to Appalachian regional development. Job creation projects are vitally needed if progress is to be made in these disaster areas, but the unambitious nature and results of Operation Mainstream and the rural Neighborhood Youth Corps underscore the importance of linking job creation to a more imaginative program design.

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[11] See, for example, Ray Marshall, Labor in the South (Cambridge, Mass.,: Harvard University Press, 1967), and Niles M. Hansen, Rural Poverty and the Urban Crisis, (Bloomington, Ind.,: Indiana University, 1970).

The relative success of the large farmer and the long-term decline of the small family farm presumably render meaningless any large-scale plan to combat rural poverty through agricultural development. But the lot of those who remain on the land and who will not move for various reasons could be considerably improved. With towns now purchasing farms to keep them out of the hands of developers, it seems reasonable that a simultaneous infusion of human capital could upgrade the preserved property. If it is possible to obtain public agreement to remove such land from the marketplace, then presumably that land could be improved through the assistance of publicly-financed labor, where the advantages of automation are either unavailable or too expensive. Certainly, precedents exist for such an approach in the State's treatment of its timberlands and parklands, and the public investment could be considerably enhanced through such work.

The lot of some farmers in poverty areas could also be improved. Caudill has observed that a substantial part of the river bottoms in the Cumberland Mountains could be adapted to the production of strawberries, raspberries, blackberries, and blueberries. He argues that demonstration programs would be necessary to convince the mountaineers to exchange their primitive approach to farming for such new crops and new farming methods, but job creation projects would lend themselves well to such activity. Other efforts might include projects that are ecologically and nutritionally sound, but not yet commercially feasible for lack of public acceptance.[12]

UTILIZING PROJECT PARTICIPANTS IN LARGER ECONOMIC DEVELOPMENT EFFORTS

Such agricultural innovations rest on the ability of communities to combine job creation with more ambitious local economic planning. The Office of Management and Budget and various Federal agencies have encouraged local and substate planning in this area, but under current economic conditions, significant supporting resources have not materialized. The possibility of utilizing project participants in larger community development efforts might encourage these local groups to proceed with the design and construction of minor public improvements, such as open space, recreation, and shoreline development. Such an injection of human capital might free funds to support other expenses, and thus enable the larger project to move forward.

12/ Harry L. Caudill, Night Comes to the Cumberlands: A Biography of a Depressed Area. Foreword by Steward L. Udall (Boston: Little, Brown and Co., 1963), pp. 388-90.

Hearings on the expansion of public works activity and also on the status and implementation of the Title X "Job Opportunities Program" suggest that project participants could be linked with larger public works proposals in several ways. If more long-term public works proposals were already "engineered," and thus available on a contingency plan basis, project participants could be inserted into some of them in a "job effective" fashion, according to Mr. George Karras, an EDA official.13/ These projects are more along traditional lines than the highly labor-intensive projects envisioned under Title X, where engineering is minimal; given the presumed link between these long-term projects and economic growth, however, the feasibility of inserting public service employment here should be explored carefully. The relatively recent expansion of EDA into urban areas also should open up additional significant work opportunities.

But is the 18,000 projects proposed by Federal administrative agencies in response to the Title X mandate that should be most closely scrutinized. In 1975, the Secretary of Commerce wrote to 44 departments and agencies asking them to identify suitable opportunities for temporary job creation. They were asked to identify those projects which: could be initiated promptly and be substantially completed within 12 months; would be consistent with locally-approved comprehensive plans for the jurisdiction affected, whenever such plans exist; and were labor intensive.14/ The agencies were to give special attention to stimulating jobs "in the private sector for private purposes." Scrutiny of the national list of funded projects and county lists of project applications reveals a wide gamut of proposals, including a number in the field of economic development. It would be premature to reach a conclusion on job creation potential for economic development before the results of these projects are carefully analyzed.

13/ U.S. Congress. Senate Committee on Public Works. Public Works Employment Act of 1975, Hearings before the Subcommittee on Economic Development on S1587 and S1704, 94th Cong., 1st sess., 1975, p. 44.

14/ U.S. Congress. House Committee on Public Works and Transportation. Status and Implementation of Title X "Job Opportunities Program" of the Public Works and Economic Development Act of 1965, as Amended. Hearing before the Subcommittee on Economic Development, 94th Cong., 1st sess., 1975.

Local Initiatives to Meet Public Project Needs

Conscious of the need to develop more decentralized models of public service employment, the Canadian Federal Government ran a series of programs during the early 1970's which it located in the Job Creation Branch of the Department of Manpower and Immigration. The Government has now sharply curtailed or eliminated these programs, but they have provided several alternative models for reaching individuals and groups sufffering from structural as well as cyclical unemployment. The two major programs were designed to combat specific problems that plague Canada in good and bad times, rather than general downturns in the economy. The Local Initiative Program (LIP) was thus designed to alleviate high seasonal unemployment in the winter and spring, while Opportunities for Youth (OFY) was intended to meet the summer employment needs of students and other young people. Neither program permitted employment to extend beyond 26 weeks. In contrast, the Local Employment Assistance Program (LEAP) was a year-round program intended to provide jobs to those who were, as the Department put it, "not likely to become employed through normal labor market activity."

THE LOCAL INITIATIVE PROGRAM (LIP)

LIP received the most critical acclaim, at least in the U.S., because it offered a public service employment model built around projects rather than around ongoing administrative agency activity. The projects enabled individuals, private nonprofit organizations, or municipal agencies to suggest innovative approaches which would create new jobs and benefit the community. Projects had to demonstrate community support and were not to duplicate existing facilities, although they could (and often did) provide services already dispensed in an area if they did so in conjunction with established public or private nonprofit agencies. Local agencies thus sometimes submitted proposals that collaborated with, and other times competed with, proposals from individuals and groups within the private sector. Generally, the projects could generate sufficient revenue to become self-supporting, but could not operate at a profit.

The initiator usually became the project manager, and might also be the sponsor if an established agency did not perform that role. The sponsor signed a contract with the Manpower Department specifying what the project would produce within a stipulated time and the number of employees that it would use. The project managers were to earn the prevailing wage in a locality for comparable work up to a maximum of $140 per week, while those employed by the manager or sponsor could earn up to $115 per week. The Federal Government would contribute $22

TABLE 10. LIP ACTIVITIES BY TYPE OF PROGRAM SPONSOR, 1973-74

ACTIVITY	PROGRAM SPONSOR										
	Total	Local Government Bodies	Other Government Agencies	Indian and Eskimo Groups.	Cultural Groups	Religious Groups	Service & Welfare Organizations	Bus. & Labor Organizations	Citizens Committee	Rec. & Leisure Organization	Indiv.
Building construction	21.8	3.5	1.3	3.2	0.9	2.3	2.3	0.4	2.8	3.5	1.6
Nonbuilding construct	15.5	5.7	.9	1.3	.2	.2	.4	.3	1.5	2.6	2.4
Lands, parks, & forestry	8.5	3.1	.8	.8	.4	.1	.2	.3	.4	1.2	1.2
Artistic & cultural	4.9	.1	.2	.3	1.9	0	.2	.1	.2	.2	1.7
Education	8.5	.2	1.2	.2	.5	.2	2.3	.3	.7	.4	2.5
Information	2.8	.1	.1	.1	.2	0	.3	.2	.9	0	.9
Social services	28.5	1.0	.7	1.5	.7	.7	6.4	1.1	4.4	1.1	10.7
Health services	1.1	0	.2	0	0	0	.5	.1	.1	0	.2
Sports & recreation	4.9	.7	.4	.1	.2	0	.1	.2	.4	1.9	.9
Research	3.7	.6	.3	0	.6	0	.4	.3	.4	.2	.9
TOTAL	100.0	15.0	6.1	7.5	5.6	3.5	13.1	3.3	11.8	11.1	23.0

SOURCE: Canadian Department of Manpower and Immigration, reprinted in U.S., Congress. Joint Economic Committee, "The Canadian Job Creation Model and Its Applicability to the United States," by Dr. Thomas Barocci, A Study Prepared for the Use of the Subcommittee on Economic Growth, *Achieving the Gaols of the Employment Act of 1946--Thirtieth Anniversary Review*, Vol. 1--Employment, 94th Cong., 2d sess., 1976, p. 9.

per week to cover administrative expenses and would contribute the unemployment insurance benefits.15/ All project participants had to be referred by the Canadian equivalent of the U.S. Employment Service, and priority was given to individuals receiving unemployment compensation or welfare benefits. The Job Creation Branch monitored and evaluated the projects.

The initial application consisted of only one page, and dealt primarily with budgetary and personnel questions. The actual program proposals were discussed at subsequent interviews with the project managers and sponsors. These interviews were conducted by the Constituency Advisory Groups (CAGs) and followed circulation of the application to the Provincial Government and Federal agencies interested in the substantive area. Each CAG consisted of nine individuals active in community affairs who were to be appointed by the local Member of Parliament (MP). The CAG was to draw together the views expressed on the various projects and rank-order the projects. It was intended that the Job Creation Branch assign a high priority to these recommendations, and, according to one observer, 95 percent of the projects designated by the CAGs were funded.16/ The MP, however, was not obligated to appoint a CAG and some members of the opposition party chose to exert greater influence in the selection of projects themselves. The overall allocation of funds to each of the 41 economic regions into which Canada is divided depended in each case on the extent to which the area's unemployment rate exceeded 4 percent "full employment."

Nature of the Projects

The most impressive achievement of the LIP program is the wide gamut of activities, managers, and sponsors that its emphasis on local initiative produced. Evaluation of programmatic quality and output seems surprisingly scarce, but, as Table 10 demonstrates, the experiment pinpointed a wide range of social and economic needs. The projects also reflected a healthy balance between physical and social projects, although the building construction category is somewhat misleading, since most of the construction consisted of maintenance and improvements on existing facilities. Only 17 percent of a grant could be used for administrative overhead, equipment, and supplies, but some projects succeeded in obtaining additional contributions from other sources.

15/ U.S. Congress. House Committee on Public Works and Transportation. Local Public Works Capital Development and Investment Program. Hearings on H.R. 5247 and Related Bills, 94th Cong., 1st sess., 1975, p. 5.

16/ Ibid., p. 11.

Although the overall project distribution is wide, it appears that certain CAG's encouraged, or simply selected, projects involving construction, maintenance, and forestry, while others were more inclined in the direction of educational, cultural, health, and recreational services. (But these differences may reflect no more than the needs of particular localities.) The design of the projects generally demonstrates an impressive ability on the part of public and private agencies to sponsor activities that do not merely substitute Federally-funded for locally-funded personnel. There is also a healthy balance between projects apparently initiated by the agencies (closely paralleling some of the better work done under EEA and CETA) and suggestions that appear to have come from outsiders whose ideas and management were endorsed by the agencies, although with modifications in some cases. And, while the programs grew out of economic necessity, they communicated a sense that they were no-nonsense, creative, and potentially-effective solutions to practical and well-defined needs.

The projects also provided good balance among the sponsors; 21 percent were sponsored by local, State, or Federal agencies, 23 percent directly by individuals, and 56 percent by private agencies. As table 1 indicates, support was also spread judiciously among the different types of private groups and agencies, with no particular type of group receiving more than 23 percent of the funding. Only 3 percent of the projects were sponsored by business or labor groups, however.

LIP did show some interest in developing projects in self-supporting non-service activities. During its first year, the Director of the Special Programs Branch reported that LIP received about 1,100 applications for projects that were, as he put it, "straight businesses run cooperatively."17/ On the other hand, most of these projects involved arts and crafts, cultural, and other groups which were not particularly oriented toward profit. By the end of 1973, the Department of Manpower and Immigration began experimenting with an Entrepreneurial LIP. Mindful of previous funding cuts and aware that its days might be numbered, it began advertising "Do-It-Yourself LIP--Get a Good Idea and Get It Growing." The Department emphasized that a project could have up to $75,000, because "next to 'local,' this year's LIP stresses imagination most." Companies could become involved in Do-It-Yourself Business LIP to provide facilities or services for their communities, if their activities created additional jobs and did not relate to business operations.

17/ Canadian Council on Social Development, New Concepts of Work. Proceedings of a Conference (Ottawa, Ont., 1974).

Some success was reported with such Entrepreneurial LIP projects among the Nova Scotia fishermen and on Indian reservations, but funding ended before much progress had been made. The principle seems worthy of further exploration. In the U.S., as well as Canada, there are relatively few avenues available for young or inexperienced entrepreneurs to obtain even relatively small amounts of working capital. Such projects could provide "seed money" to innovative and labor-intensive small businesses and need not conflict with the functions of private companies.

Assessing LIP as a Program Model

LIP is only one way that a project approach might be developed, and its assessment here reflects the view that some of its problems were endemic to any project approach, while others could be overcome by adjusting the administrative mechanism. The project approach offers some clear-cut advantages; as Gartner observes, it provides "a way of avoiding the rigidities of oldline public agencies and introduces some competition into the production of public service."18/ Indeed, in view of the major role played by established agencies in sponsoring the projects, it is surprising that established-agency and new-project activities coexisted as smoothly as they did. Presumably, the universe of need proved so sizeable that mutual adjustment did not threaten existing activities.

The projects also afforded a number of persons a first opportunity to demonstrate to themselves and to the public what they can do. As one experienced sponsor put it in an interview with the author, "It's the first time in the lives of the people involved in A Helping Hand that they had a chance to do something for other people." Lerman has pointed out that the local initiative at the heart of LIP offered project applicants a chance to act on their own initiative and thus led them to identify more closely with the specific project and its output.19/ Again, for a short-run job creation project, this very identification simultaneously becomes a symbol of success and frustration--particularly where, as in the case of LIP, those services and jobs were terminated partly as a result of worsening economic conditions.

18/ U.S. Congress. House Committee on Public Works and Transportation. Public Works Project and Program Acceleration. Hearings before the Subcommittee on Economic Development on H.R. 3067, 94th Cong., 1st sess., 1975, p. 71.

19/ Robert I. Lerman, "The Public Employment Bandwagon Takes the Wrong Road," *Challenge* (January-February, 1975), pp. 10-16.

An evaluation conducted by the School of Social Welfare at the University of Calgary reveals that workers expressed high levels of job satisfaction and improved feelings of accomplishment. LIP employees felt that they had increased their self-confidence, community awareness, and feeling of security. Users said that the product or service was important to them and generally rated the quality as good or very good.20/ But the combination of the remaining economic and social need and the benefits derived by the LIP workers has led them to suffer from what some have called "termination shock."

A project approach poses several problems for the delivery of some social services. In the short run, there is the danger that clients will come to depend on services that will disappear after 26 weeks unless substitute personnel or alternative funding are located. This difficulty can be partly alleviated by selecting certain types of projects and omitting others.

In the long run, other problems emerge. In some cases, the perpetuation of a project creates an alternative delivery system. Even if professionals accept the existence of this temporary "shadow" service deliverer, it is questionable how long it is advisable for primary and secondary delivery systems to coexist--one tenured and permanent, the other ad hoc and temporary. If a relatively high unemployment rate persists, this system could begin to harden, and, rather than creating competition, the secondary system could serve as a buffer protecting the primary system from the need to adapt to social change. The public and Congress also might opt for perpetuating such a temporary arrangement rather than add to a permanent civil service and operate through an increasingly expensive permanent bureaucracy. A "secondary labor market" might then arise within the public sector and might be tolerated by the civil service unions on the grounds that it would protect their regular membership in a period of budgetary retrenchment. This set of circumstances did not arise in the LIP program, because so much of its effort was directed at seasonal workers and students who intended to return to their primary occupations.

Objectives conflict when a public employment program tries simultaneously to meet the income needs of the cyclically unemployed and disadvantaged, to provide services, and stimulate aggregate demand. Providing the most effective services may conflict with the goal of the less-skilled, pegging the wage at a sufficiently high level to draw individuals off unemployment insurance but sufficiently low to avoid competition with the private sector is likely to affect recruitment. But there are tradeoffs here that can be made successfully, and LIP seems to have handled this problem without too much difficulty.

20/ U.S. Congress. House Committee on Education and Labor Equal Opportunity and Full Employment, op.cit., p. 71.

Ross estimates that approximately half of the LIP workers in the 1971-72 program had been collecting either UI or social assistance before they entered the program.21/ The gross cost of the projects in economic terms thus does not equal the net costs and that difference could have been increased by adopting tighter guidelines than the Canadians chose to use.

ALTERNATIVE JOB CREATION MODELS

The Province of Alberta has embarked on a $12 million Priority Employment Program (called "PEP") designed to combat high unemployment. It includes a grant to agricultural societies for construction, primarily of buildings for recreational purposes; a grant to its Department of the Environment intended to finance efforts to restore and upgrade water channels; and a Direct Employment Program which assigns priority to placing unemployed persons receiving UI or public assistance in short-term jobs in Albertan departments or agencies. PEP is operated directly through provincial agencies, in contrast with LIP, but was able to coordinate closely with the LIP model.22/

The Local Employment Assistance Program (LEAP) was operated by the Department of Manpower and Immigration, and was designed expressly to meet the needs of the disadvantaged. Annual funding never exceeded $12 million, but the model bears close scrutiny, since it offers some indications of how a project approach would fare in working with those experiencing structural unemployment. These projects can extend up to three years, have funding and eligibility criteria different from those of LIP, and allow training to be tied closely to work experience.

Utilization of the Disadvantaged in Combating Environmental Challenges

Some of the more recent discussions of public service employment have made much of the distinction between countercyclical and structural employment, and have viewed PSE as better suited to meet the needs of those persons whose unemployment is only temporary. It is difficult to see, however, how such an approach can be fully justified, politically and socially. A large-scale job creation program presumably would have to provide a mix of projects and job slots designed primarily for temporarily unemployed persons, but including some positions for disadvantaged persons as well. A number of environmental projects already have demonstrated the utility of using unskilled and semiskilled persons to deal with a whole gamut of problems and challenges.

21/ David P. Ross, The Future Course of Work Opportunity Programs (Ottawa, Canadian Council on Social Development, mimeo, May 1973), p. 5.

22/ Canadian Council on Social Development, op.cit., pp. 83-85.

"CROSS-COMMITTING" PROGRAM GOALS AND FUNDS

The most ambitious and creative proposal designed to meet a national need and hire substantial numbers of unskilled persons was first made in an article written by Roger Starr and James Carlson in 1967.23/ They found that there were three principal sources of water pollution that undercut the efforts of municipal sewage-treatment plants: agricultural pollution (such as the carrying of organic fertilizers directly into the waterways); industrial waste (where somewhat surprising progress has been made since 1967, although dumping remains a problem in some cases); and the most important source of pollution--rainfall. The authors mention the possibility of rain becoming polluted as it makes its way through the atmosphere and through radioactivity, but they focus on the damage wreaked by rain-induced pollution upon sewage treatment. This damage results from combining storm flow and sewage flow.

Municipal sewer systems were designed originally to carry off storm water flow--not domestic and industrial waste. House drains could be connected with the storm drains only when it was determined that, for health reasons, domestic sewage could not be left in the soil surrounding the water mains. There is no problem in combining the two systems provided that the flow does not back up into streets and cellars--a possibility that becomes dangerous if domestic sewage has been added to storm sewage. Furthermore, the sewage treatment facility must then be large enough to treat the maximum anticipated flow of sewage as well as what at times can be a considerable volume of storm water. Thanks to the overwhelming cost that would be incurred by construction on such a scale, Starr and Carlson found that sanitary engineers:

> deliberately design plants that will handle only the dry weather flow of combined storm and sanitary sewers. When rain produces an augmented flow, any water in excess of the designed capacity of the treatment facility is diverted directly into the natural watercourse without any treatment whatever. No procedure has been found to separate the sanitary, sewage flow from the storm-drainage flow; therefore, each significant storm, in a city with combined sewers, nullifies the entire sewage-treatment effort and discharges a considerable volume of raw sewage into the very bodies of water which the treatment program was designed to protect.24/

23/ Roger Starr and James Carlson, "Pollution and Poverty: The Strategy of Cross-Committment," The Public Interest, 10 (Winter 1968), pp. 104-31.

24/ Ibid., p. 118.

Experts apparently disagree on the significance of storm flooding as a source of water pollution. Only about 2 percent of the total stream pollution in the U.S. is believed to come from storm flooding of combined sewers, but there appears to be agreement that this proportion is considerably higher in the waters surrounding most American cities. Those who question the wisdom of separating storm sewers from sanitary sewers point out that storm run-offs also contain pollutants, and that no means of treating storm-water sewer effluent has been devised. Other critics believe that the cost of sewer separation is beyond "the limit of acceptable costs for water depollution goals." Starr and Carlson agree that many American cities may not yet have experienced critical pollution levels, but argue that sewer separation will be required eventually if water pollution is to be reduced to acceptable levels.

Creating a Half-Million Work-Years of Employment

The relatively low profile of stormwater as a serious source of pollution may in part explain the apparent lack of impact of the Starr and Carlson proposal. In 1967, moreover, job creation was not an idea whose time had come, and the public's willingness to commit substantial funds to preserving the environment had not yet become evident. Then, too, the strategy of cross-commitment implies a considerably different approach than that of the poverty efforts of the 1960's. Most importantly, the scope of the proposal in terms of manpower, money, and material looked audacious in terms of how many--and who--were unemployed in 1967.

Starr and Carlson estimated that "by the most cheerful estimates," it would cost $35 billion to eliminate the backlog of unmet sewage-treatment needs of the Nation's municipalities, and an additional $65 billion if the Nation were to anticipate the need for more advanced treatment plants and sewer lines in the years ahead--costs that have now risen markedly thanks to inflation and spiraling construction costs. It was this very magnitude in costs that led Starr and Carlson to hail the "economic beauty of sewers" as fully justifying their cross-commitment strategy. Half of their estimated total would involve the placement of sewage lines, a type of construction activity in which unskilled laborers account for as much as 40 percent of all on-site workhours.[25] If the Nation were to focus on the "modest" $30 billion expense of complete separation of sanitary and storm sewers, the result would be direct wage payments of around $2.5 billion to unskilled laborers. At an assumed annual wage of $5,000, this work could generate half a million work-years of employment--enough to provide jobs of one year's duration for three-fourths of all males who were then unemployed for five weeks or more.26/ They estimated that roughly 25¢ of every dollar spent on sewer lines or treatment plants would go to direct wage payments, and almost half of those wages would be paid to unskilled or semiskilled persons.

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[25] Ibid., p. 128.

Each hour of work performed on the construction site would also generate an additional 1.6 work-hours off the site. The primary beneficiaries of this multiplier effect would be the "stone, clay and glass, and machinery manufacturers and the trade and transportation industries." Adding together the on-site jobs created and the off-site jobs stimulated by this public investment, the result would be a payment of 65¢ in direct and indirect wages for every $1.00 put into the project.

The authors of this "cross-commitment strategy" were probably optimistic about the amount of unskilled and semiskilled labor that could be used on such a project even in 1967. Their data was based on national and regional surveys, but the task of laying sewer pipe is considerably more complicated in large urban areas than in other parts of the country. In the intervening 10 years, new technology and increasing mechanization have also affected skill requirements. Formal training is not a prerequisite, but aptitudes for running mechanized equipment are decided assets.

A Federally-sponsored project, however, has two advantages in this respect. First, it could stipulate that a certain proportion of unskilled persons be hired, and second, it could involve private industry rather than a public sponsor. A sewer separation project, then, has considerable merit in terms of both the national need that it could meet and in providing jobs for a segment of the labor force hard-hit by the economy of the 1970's.

LABOR-INTENSIVE CONSERVATION PROJECTS

In addition to work that must be done to maintain and improve our parks and recreational areas, there are a number of other important conservation projects of varying dimensions that unskilled and semiskilled workers could perform.

26/ Ibid., p. 129.

Conserving Human and Natural Resources

In 1964, Senator Gaylord Nelson argued that "through sheer failure to act we are wasting irreplaceable natural resources at an ever increasing rate; at the same time there are millions of men who want to work but who cannot find jobs (and) are wasting their lives in poverty."[27] To combat these twin problems, Senator Nelson proposed the Human and Resource Conservation Act of 1964, and held hearings which had little apparent impact. More significantly, Senate Labor and Public Welfare Committee staff members conducted a survey of Federal, State, and Local agencies in the natural resource field, asking whether substantial numbers of disadvantaged workers could be utilized, what kinds of projects could be undertaken, and how many work-years would be required to complete the projects.[28]

While the survey is 13 years old, more recent evidence certainly does not point to subsequent improvement in the identified problem areas, and, unlike many later efforts, this survey specifically addressed the question of what projects could be accomplished by disadvantaged workers. Because other issue areas often require larger proportions of skilled workers, it is useful to see how widely agencies feel that such personnel can be utilized in conservation projects and what specific projects are frequently identified when States and localities are asked to use their initiative. The responses varied widely in their degree of specificity. It was not possible, therefore, to estimate the number of work-years required nationally to complete certain types of projects; it was possible, however, to aggregate the data and thereby learn how widely various environmental needs are felt throughout the country.[29] Table 11 identifies the most frequently mentioned environmental job creation projects.

Significantly, when given the opportunity, many local jurisdictions pinpointed problems that have also preoccupied nationally-known environmentalists. Localities in 40 percent or more of the States thus identified such problems as wildlife habitat improvement, stream and river protection and clearance, timber stand improvement, and water supply systems and water projects. Other projects of particular local interest also surfaced, including fish hatchery installation, maintenance, and harvesting; general facility maintenance; and roadside improvement. Professional environmentalists continue to differ over what, if anything, should be done to control soil erosion, but cities, counties, and agencies in 22 States mentioned this politically sensitive issue.

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[27] Congressional Record, June 26, 1964, p. 15176.

[28] U.S. Congress. Senate Committee on Labor and Public Welfare. Conserve Human and Natural Resources of the Nation. Hearings before the Subcommittee on Employment and Manpower, 88th Cong., 2nd sess., 1964.

[29] Ibid., Appendix, pp. 77-335.

TABLE 11. NUMBER OF STATES WITH LOCALITIES PROPOSING ENVIRONMENTAL JOB CREATION, BY TYPE OF PROJECT

Environmentally related sites:	
Conservation work	21
Fire control roads	8
Firebreaks and fire control aids	13
Fish hatchery installation, maintenance, & harvesting	18
Forestry work	14
Insect and disease control	7
Lake and pond development	14
Nursery development	4
Range improvement	4
River frontage restoration	7
Road construction	32
Roadside improvement	24
Stream and river protection and clearance	28
Timber stand improvement	30
Water supply systems and water projects	20
Wildlife habitat improvement	22

Water and land use improvement:		Facility improvement:	
Boundary marking	7	Bench construction & maint.	4
Brush control	9	Bridge construction & maint.	14
Cleanup (general)	24	Dam construction & maint.	11
Drainage ditch digging	9	Facility construction (gen.)	33
Drainage maintenance	17	Fence construction	20
Erosion control	22	Headquarters maintenance	6
Flood control	6	Restrooms and reststops	9
Land treatment and development	6	Retaining walls	7
Landscaping	22	Sign making	11
Painting	11		
Planting and seeding (general)	24		
Road grading	13		
Tree planting	39		
Underbrush clearance	32		
Weeding	6		

Note.--Although localities in all of the States, as well as some State agencies, responded to the Committee's survey, some of the replies were too general to allow a detailed breakdown. The number of States with localities intending to initiate a particular project may therefore be higher in some cases than these figures indicate.

SOURCE: Table and categories constructed from date in U.S. Congress, Senate Committee on Labor and Public Welfare. *Conserve Human and Natural Resources of the Nation*. Hearings before the Subcommittee on Employment and Manpower, 88th Cong., 2d sess., 1964. Appendix, pp. 77-335.

The Federal administrative agencies were often quite explicit about what unskilled labor could do to meet important environmental needs. They supplied data indicating that they could establish soil and watershed conservation programs on 300 million acres of farmland, and on the western ranchlands could clear brush, spread water and vegetation over 200 million acres of Federal grazing districts and forest service lands. The Forest Service estimated that there were 70 million acres of unproductive land in need of reforestation by planting and seeding. The Army Corps of Engineers supplied a list of activities to be done on Federal lands that closely paralleled a number of the projects that State and local agencies wanted to pursue on their public lands.

Forest and Wilderness Enhancement

Forest land constitutes a particularly promising candidate for public jobs programs for other reasons besides the concern of environmentalists and agencies. Timber growth has increased in recent years on public lands but, as a result largely of timber harvesting, removals of softwood exceeded net growth in 1970 by 18 percent. National Forests supplied 17 percent of the timber harvest that year, and other public lands an additional 7 percent (which is roughly proportional to the amount of timber land held by the public sector). The Forest Service has stated, however, that allowable harvests from these lands can be expected to drop sharply in coming years, unless forest management and utilization of timber on these lands is intensified.30/ Even companies which own much of their own timber have publicly stated their concern over allowing such a situation to continue. Given our heavy importation of other resources, an increase in our reliance on Canada and other foreign sources for our timber seems ill-advised.

A shortage of timber would necessitate the substitution of steel, aluminum, and plastics that are derived from depletable resources and thus pose environmental as well as economic problems. In its Environmental Program for the Future, the Forest Service observed in 1974 that timber demand is closely tied to residential construction, which in turn depends on the number of new households and the age of the family head. 31/ It has found that, generally, a new housing unit is required for each new household or family, and it refers to

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30/ U.S. Department of Agriculture, Forest Service. The Outlook for Timber in the United States, Forest Resource Report, No. 20 (Washington, October 1973), p.2.

31/ Environmental Program for the Future, U.S. Forest Service (Washington, D.C., 1974).

estimates that households will grow by approximately 1 million annually in the 1970's and by 1.1 million each year in the 1980's. To that figure must be added the number of units torn down in cities and abandoned by those leaving rural areas. The problem will become acute in the case of some soft woods that are particularly expensive to grow.

Forest management includes such activities as protection against fire, reforestation, timber stand improvement, and thinnings. 32/ Some of these activities have been mechanized in recent years, but others must be done by hand. Reforestation after a fire, for example, is semi-mechanized, but it also requires a good deal of hand planting and other labor. The care and feeding of seedlings is labor-intensive, as are forest blight and insect control.

In addition, workers could "restore wilderness" in old rural areas by clearing out dilapidated farm houses, capping dry wells, and removing fence lines. In response to EDA's 1974 Title X survey, the Forest Service identified 75 different kinds of activities that were labor intensive and would require comparatively little equipment and few supplies. 33/ These programs could be designed to run seasonally in some parts of the country and elsewhere on a longer basis--an arrangement that would make sense environmentally, too, because timber needs and wilderness problems reveal considerable regional differences.

Strip Mining Reclamation

Coal increasingly looms as an intermediate, as well as short-range, expedient for dealing with the energy crisis, and the old as well as coming ravages of strip mining may necessitate an increased governmental response on environmental grounds--a response that might include in part the use of public job programs. Corporations engaged in strip mining are now required by most States to reclaim areas where they dig, but it might be mutually advantageous to both the public and private sectors to have such work include the introduction of public job efforts.

Even now, most of the smaller strip-mining companies in the Appalachian region continue to camouflage rather than reclaim. Branson indicates that the most common form of reclamation practiced there "consists of partial grading and screening--rows of trees,

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32/ U.S. Department of Agriculture, Forest Service, The Outlook for Timber in the United States, p. 36.

33/ U.S. Congress. House Committee on Public Works and Transportation. Status and Implementation of Title X "Job Opportunities Program" of the Public Works and Economic Development Act of 1965, as Amended. Hearings before the Subcommittee on Economic Development, 94th Cong., 1st Sess., 1975.

often white pine, planted along highways to screen the devastation from view." 34/ The National Coal Association estimates that about 65,000 acres are strip-mined each year. Nationally, Conservation Report indicated that strip mining had disrupted 2,500 square miles of land by 1973--an area roughly equivalent to that of Delaware and Rhode Island combined. 35/

Little can be done about much of this acreage, and where solutions do exist, they sometimes involve construction, the creation of man-made lakes, and other programs that are not labor-intensive. A number of other environmental side effects, however, would seem to lend themselves to public job programs, including prevention of landslides and mudslides, long-term erosion control, and development of a fish habitat in those strip-mine lakes that are not acid-polluted.

Support of the "twin objectives of profitable mining and better reclamation" is not limited to Federal administrative agencies and moderate conservationist groups. A number of conservationists now acknowledge, albeit somewhat unenthusiastically, the need to increase coal production, and, for their part, the Soil Conservation Service and Forest Service have conducted what one critic views as "a fair amount of productive research on strip-mine reclamation." 36/ Job creation projects designed to conserve strip-mine areas thus might throw together some strange bedfellows, but perhaps that is what public job projects, which lack a natural constituency of their own, require.

Nationwide Dissemination of A "Preventive Health Care Package"

Although there is increasing public support for the belief that all Americans should receive sufficient medical attention, economic trends of recent years have tended to make doctors and hospitals less accessible to many lower and lower-middle income whites and blacks. HEW figures indicate that the number of doctors is now growing more rapidly than the population, but these doctors are not distributed evenly throughout the country. The Health Resources Administration of the Public Health Service has found that in 1973 there were

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34/ Branley Allan Branson, "Stripping the Appalachians." Natural History 83/No.9 (November 1974), p.60.

35/ National Wildlife Federation. Conservation Report, No. 35, 93d Cong., 1st Sess., September 7, 1973, p. 390.

36/ John Walsh, "Strip Mining: Kentucky Begins to Close the Reclamation Gap," Science 150 (October 1965), p. 30.

approximately 196 nonfederal physicians providing patient care for every 100,000 individuals living in the largest metropolitan areas, while the ratio for small non-metropolitan counties was 40 physicians for every 100,000 residents. Nor is care distributed evenly within urban areas.

There are no easy ways to counter such trends, but one partial solution is to provide more preventive health care to poor and near-poor rural and inner city residents, thereby relieving some of the pressure on existing medical facilities and accessible practitioners of curative medicine. Under current conditions, an ounce of prevention is worth dollars. Furthermore, if it becomes a right to receive medical care, methods must be found to reach out to disadvantaged Americans and make that legislative dream a reality. Such outreach will require drawing on existing knowledge and precedents to undertake activities that a number of medical hospitals and other facilities would like to extend, but have not considered in the light of current fiscal constraints and labor shortages.

EXTENDING HEALTH SERVICES THROUGH OUTREACH TEAMS

While the outreach capability of most existing medical facilities is limited, they are usually involved in some activities of this kind. They hire unskilled and semiskilled individuals whom they then train briefly to handle rudimentary identification and referral functions. So long as these persons are involved in reading and description of problems, rather than interpretation and analysis, medical units have managed to use them smoothly and effectively alongside medical professionals. It should not be difficult to attach outreach teams to regular medical facilities, and thus gain the advantages of having the facility personnel engage in monitoring and quality control activities without running the risk of a substitution effect.

COMPONENTS OF A "PREVENTIVE HEALTH CARE PACKAGE"

There are a number of elements that could be included in a "Preventive Health Care Package" to be supplied by outreach aides. Not all of the activities indicated in table 12 would necessarily be appropriate in a particular locale, and the size of the package would depend on whether the supervisor was included in the outreach team itself or was a nurse or other regular member of the medical facility supervising from a distance--either arrangement would involve supervision by medical professionals, but the makeup of the team would, of course, determine how much could be accomplished. All of the functions listed, however, could be performed by persons with only a few weeks of training.

TABLE 12. THE ELEMENTS CONSTITUTING A "PREVENTIVE HEALTH CARE PACKAGE"

Outreach target	Problem	Diagnosis/Assistance
Identification of the systemic condition accompanying high blood pressure	High blood pressure, especially arterial blood pressure.	Blood pressure recordings to be taken of persons seven years of age and over.
Diabetes, pancreatic, or kidney disorders	Excessive amount of suger in the blood or urine.	Urine examination.
Syphilis and gonorrhea	Idantification of carriers as well as those having venereal disease.	Blood test of those in a "high-index-of-suspicion" age group.
Avoidance of childhood diseases	German measles, "hard" measles, mumps, smallpox, tuberculosis	Innoculations to be administered in the following combinations: 1. Rubeola, mumps, and rubella vaccines 2. Smallpox, oral polio, and tuberculosis
Avoidance of adult diseases	Diptheria, Pertusis, Tetanus, Poliomyelitis, Influensa	Innoculations to be administered for influensa, tetanus, and polio.
Preliminary dental examination	Caries, periodontal disease, and orthodontic problems	Screening and referral to supervised dental assistants and dental hygenists.
Prenatal care encouragement	To insure that disadvantaged women seek prenatal care early in pregnancy.	Screening and referral of mothers unaffiliated with a doctor and identification of "high risk" women.
Provision of aftercare in cooperation with hospitals and other community health organisations.	Confusion over directions related to prescribed medical care.	Monitoring and opportunity to provide feedback for the patient.
Assessment of general living conditions	Inadequate nutrition, sub-standard housing, existence of lice, presence of child abuse, enuresis, or identification of other "environmental risk potentials."	Checklist to serve as basis for subsequent agency referrals.
Regional tests where needed.	Poisoning through lead-based paints in inner city areas.	Blood test for children under the age of six.
	Intestinal parasites in some parts of the south.	Stool examination
Provision of preventive health information		Film to be shown including such topics as substance abuse, first-aid, and identification and control of diseases like epilepsy, sickle cell anemia, and muscular and nervous diseases.

For example, the technique used in identifying individuals suffering from hypertension is a skill that could be assumed by an aide. Blood pressure recordings are often taken by paraprofessionals in school health programs.

In the case of diabetes, the dipstick exam is an initial type of screening examination which is simple to administer and whose results are useful in providing two types of readings, sugar and protein. It could thus indicate kidney or pancreatic disease too.

According to HEW's Forward Plan for Health, FY 1977-81, of the six major categories in the leading microbial causes of death and morbidity, venereal diseases constitute the category that ranks highest. Gonorrhea alone has an estimated annual incidence of 2.5 million cases. The blood test is easy to give for syphilis, although not everyone will submit to it. While some public resistance can be anticipated, the test procedures are well within the technical grasp of trained outreach teams.

Innoculations to avoid childhood diseases are particularly important for children 7 years of age and below who are not yet attending school. Public health nurses have the authority to administer these injections independently, and could accompany the team when injections are to be given.

Children in lower-income families also suffer from serious dental deficiencies. Lythcott, Sinnette, and Hopkins claim that of the 50,000 children living in Harlem, for example, only 15 percent receive any type of dental care and that the situation is comparable in other parts of the country.37/ After the outreach teams provide dental screening and referral, supervised dental assistants and dental hygenists could play an expanded role that would help to avoid a flood of referrals to the available dentists. A number of county health departments have sent out teams under Medicaid's Early Periodic Screening, Diagnosis, and Treatment Program for Title XIX recipients that simply used visual observation to identify oral hygiene problems and observable caries. The experience of those teams suggests that such an approach could be extended to other needy groups.

A scarcity of sufficient prenatal care for poor people is surprisingly common, even where free clinics are available. In Washington, D.C., for example, Dr. Ernest Hopkins reported that between 25 and 50 percent of minority-group mothers had inadequate prenatal care and that 16 to 25 percent received no medical evaluation before the onset of

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37/ In Richard Allen Williams, Textbook of Black-Related Diseases (New York: McGraw-Hill, 1974), p. 141.

labor.38/ Teams could identify "high risk" obstetric patients on the basis of such characteristics as age, degree of poverty, or the outcome of the last pregnancy. Weekes believes that much could be done in this area, and he also observes that antepartum care is frequently unavailable to those most in need of it.39/ Teams might also look for sickle cell disease in expectant black females and for evidence of the syndrome of narcotic withdrawal in the newborn child. Finally, teams could make certain that expectant mothers have a doctor, thus avoiding those situations where the mother must be admitted to the hospital's emergency ward, because the absence of an assigned doctor prevents access to the maternity ward.

Members of a preventive health care team can also assess a community and identify environmental risk potentials. Some public health departments have actually mapped their communities through such visual scanning; indicating where lead-based paints are used, where high levels of nitrates are present in the drinking water, and where inefficient and unsafe sewage tanks are to be found. Such information on general environmental conditions is often critically important because of its relationship to sound health. Morbidity and mortality rates are sensitive to housing conditions, and studies have demonstrated that improved housing reduces the incidence of illness and death.40/

Many medical problems could have been avoided if the victims had possessed the most rudimentary health information. A number of disadvantaged individuals might avoid serious problems if they knew more about such subjects as substances-abuse and first-aid, and were able to identify the symptoms of such diseases as epilepsy, sickle cell anemia, and muscular and nervous disorders. Outreach team members could take around with them a 35-millimeter film rear-screen projector, a self-contained unit which synchronizes with a cassette tape recorder that is built into the system. The film flashes on the screen portion of the unit (which looks like a television set). The unit can be carried in one hand, and needs only to be plugged in. It is difficult to say whether client groups would sit still and absorb this information, but the agency would at least have the advantage of knowing that it is reaching the target group, especially if there is a team member present at the filming who can answer subsequent questions and perhaps relate the material in the presentation to what he or she has detected on the premises. Current attempts by public health agencies to reach these target groups through the media are more costly and less direct.

38/ Ibid., p. 100.

39/ Ibid., p. 101.

40/ Bernard Frieden, "Housing and National Urban Goals: Old Policies and New Realities," in the Metropolitan Enigma (James Q. Wilson, ed., Garden City, Anchor Books, Doubleday and Co., 1970), pp. 170-225.

Direct, Individualized Correctional Supervision

DIVERSION PROGRAM FOR THE FIRST OFFENDER

Squeezed by the rising cost of crime and by the limited impact of overall social programs on criminal behavior, Federal and local law enforcement officials have begun to experiment with correctional programs intended to prevent convicted first offenders from becoming hardened criminals.41/ These programs differ in design, but in all cases they are separate and distinct from the regular correctional process, while remaining tied administratively to one of the agencies that is part of the legal system. Furthermore, these correctional programs spurn broader social objectives, defining their success primarily in terms of reducing the criminal recidivism rate. A community-based rehabilitation project model proposed by the National Institute of Law Enforcement and Criminal Justice thus defines its objectives as follows: to "enroll 60 percent of county jail detainees with convictions for previous stranger-to-stranger crimes (and) reduce the rearrest rate of the enrollees from 50 percent to 10 percent."42/

Juvenile courts have developed a variety of programs utilizing volunteers to supplement their limited capability to deal with the problems of youthful first offenders. The set of programs supported by Kalamazoo County's Juvenile Court is typical. It includes Court Family Visitors (which allows a "family visitor" to use his or her everyday knowledge to assist a less fortunate family in becoming self-sufficient); S.T.O.P. (Stop Taking Over Property, which provides volunteers to serve as investigators dealing with the first offender shoplifter on a "one-shot" basis); the Status Diversion Project (which assists in combating school truancy and behavior problems, as well as runaway and curfew violations); the Volunteer Probation Officer program; and tutorial assistance for children with special school problems.43/

41/ Youths below 17 are referred to a variety of social services and institutions, rather than incarcerated, but the costs of these alternatives has risen substantially too.

42/ National Institute of Law Enforcement and Criminal Justice. Criminal Justice Research: Evaluation in Criminal Justice Program Guidelines and Examples (Washington: U.S. Department of Justice, Law Enforcement Assistance Administration 1974) p. 52.

43/ Southcentral Michigan Planning Council, Comprehensive Law Enforcement and Criminal Justice Plan, 1976-77, (Region III, 1975), pp. I-188-89

The Citizens Probation Authority (CPA) in Kalamazoo County is a deferred prosecution program that operates through the Office of the Prosecuting Attorney. That Office often deems it advisable to divert first offenders or "non-patterned" offenders from the court system to a structured probationary term under CPA. Although CPA is an adult program open to eligible felons 17 years of age and above, it is not surprising, given the program's primary emphasis on first offenders, that the participants' average age is 20.5 years. The Kalamazoo program is one of 150 now operating throughout the country that are designed to reach persons who have committed non-violent property-related crimes. In addition to this type of diversion project and the juvenile diversion projects discussed above, there are other projects that specialize in working with individuals who have been involved in shoplifting or who are on drugs. The concept of deferred prosecution thus seems to be gaining favor nationally.

THE NEED FOR FEDERALLY-FUNDED "CIVILIAN PROBATION OFFICERS"

The juvenile and adult diversionary programs lack sufficient funding to afford the luxury of exclusive reliance on professional counselors and social workers, and have come to rely in varying degrees on volunteers. Interviews with some of the Kalamazoo program administrators suggest that there are definite roles for amateurs to play in such programs, and that the results are often surprisingly good. On the other hand, high turnover among the volunteers and their small numbers frequently undercut their effectiveness. These shortcomings pose a considerable problem for the correctional process.

The current trend toward pre-trial diversion is justifiable on some grounds, but it does throw the youthful offender right back into the home and community environment that often played a significant role in creating the problem in the first place. Deciding to institutionalize or not to institutionalize constitutes a dilemma, but numerous problems presumably can be avoided if the individual can be taught during an interim period to come to grips effectively with the home and community environment. Avoidance of criminal behavior then depends on providing the persons with alternative coping strategies.

Effective police youth officers, probation officers, and other professionals provide the necessary models and support, but their case loads are large and becoming larger. A number of the volunteers in juvenile and adult diversionary programs have served similar functions and performed a number of other activities as well. For example, the Michigan CPA volunteer meets with his or her client at least once a week at a mutually convenient time and place and provides support, encouragement, suggestions, transportation, and information. These volunteers usually receive several weeks of training, and are thus able to assist the CPA group leaders in conducting various workshops and group sessions. CPA places emphasis on establishing normal ties for its clients with the schools, the social fabric of the community, and the world of work (50 percent of these young adults are unemployed).

As in the case of CPA, the Volunteer Probation Counselor Program in Lincoln, Nebraska involves interaction between the volunteer and first offender for an average period of 10 months. Described as an "exemplary project" by the National Institute of Law Enforcement and Criminal Justice, this program also actively engages the probationary counselor in assisting clients with their employment and educational problems.44/

Volunteers in these programs, then, have moved well beyond their traditional "Lady Bountiful" image and have performed critical functions. It is also true, however, that this work tends to be done by a comparatively small number of "core" volunteers, while a number of others have dropped out or failed to follow through. Furthermore, none of these diversionary programs has attempted to utilize volunteers in removing the client from an unfortunate environment, even though foster care programs have achieved considerable success in placing delinquents in an alternative environment for a period of three to six months before returning them to their parents or to other relatives.

Creation of Federally-funded job slots for what might be termed civilian probation officers (CPO's) could be handled in such a way that they would meet the employment needs of the CPO and assist in meeting the coping needs of youthful first offenders. The CPO would be attached to the various diversionary agencies now active in the field but understaffed. The CPOs would assist in the usual functions of the volunteer, but would also have the youthful first offender with whom they were paired living in their homes until the professionals in the program felt that the youth could be returned to his or her family. The CPO would receive a daily board rate of \$3.25 to \$4.00, depending on the age of the youth, and the program would provide a small allowance for the youthful offender and for the medical, clothing, and other expenses now covered by programs like Foster Home Care. The CPO would receive wages for 20 hours per week, since this job would not be full time (and the part-time wage would not tempt volunteers who are already employed full-time elsewhere to quit their jobs and work for the Federal government as a CPO).

44/ National Institute of Law Enforcement and Criminal Justice, op.cit., p. 5.

Screening of CPO Applicants

On its face, the proposition that unemployed individuals can assist youthful offenders sounds unlikely, but with appropriate agency and professional linkages, considerable gains might be achieved through a comparatively limited investment. Mamie Clark and Hylan Lewis are currently working on a "model youth project" under a Department of Labor grant designed to assist black female school dropouts through the use of peer group reinforcement and peer aides who serve as role models. Volunteer probation counselors in the Lincoln, Nebraska project come from all walks of life and socio-economic levels in the community, and in 65 percent of cases in that project, the most important need fulfilled by a volunteer is that of suitable adult role model.45/ Since there are many well-qualified young adults in the current labor market who are struggling to break into their first job, we cannot assume that unemployment is a sound basis for rejecting someone who might want to become a CPO. Indeed, the well-adjusted young adult who is approaching his or her job search intelligently under current conditions may make a particularly good role model for youthful offenders.

Administration of the Program

By implementing the project through existing diversion programs, it would be possible to maximize the use of ongoing communication and control mechanisms. It would be necessary to expand professional staff as the number of CPOs increases, but here, too, young unemployed professionals could be placed in Federally-funded jobs. These positions then could be eliminated when economic conditions improve. Funds for the program could be channeled through the substate regional crime commissions now found in virtually all States, and from there to the diversionary programs.

Enhancement of Publicly Owned Parks and Recreational Land

In view of the general increase in recreational pressure on our land, it is not surprising that the Public Parks have also experienced an influx well beyond anticipated levels. The Department of the Interior predicted in 1956 that there would be 80 million visits to the National Park System during the coming 10 year period, but the actual figure was 66 percent higher.46/ In the face of such growth, the National Park Service has now concluded that, by the year 2000, there may be one billion visits to our National Parks. An expansion

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45/ Ibid., pp. 3 and 9.

46/ Ronald F. Lee, Public Use of the National Park System, 1872-2000. Foreword by George B. Hartzog, Jr. (Washington: U.S. Department of Interior, National Recreation and Park Association, 1971), p. 9.

TABLE 13. JOB CREATION PROJECTS NEEDED IN NATIONAL PARKS

National parks	Overcrowding	Inadequate protection	Inadequate sanitation	Inadequate interpretive programs	Inadequate staff	Lack of preventive maintenance	Inadequate general maintenance	Lack of structural replacement	Shortened season for full service	Lack of control	Master plan lagging
Acadia Nat'l Park, Maine	X	X		X	X		X				X
Amistad Nat'l Recreation Area, Texas				X	X	X	X	X			
Appalachian Nat'l Trail, Maine-Georgia					X		X			X	
Arches Nat'l Park, Utah		X		X	X		X				X
Assateague Isle Nat'l Seashore, Md. & Va.					X		X	X			
Badlands Nat'l Monument, South Dakota		X			X	X		X			
Bighorn Canyon Nat'l Rec. Area, Mont. & Wyo.		X	X		X			X			
Big Thicket Nat'l Pres., Texas					X					X	
Blue Ridge Nat'l Parkway, Va. & N.C.					X	X		X		X	
Buffalo Nat'l River, Arkansas			X		X		X	X			
Canyon Lands Nat'l Park, Utah		X	X	X	X		X	X			
Cape Cod Nat'l Seashore, Massachusetts				X	X					X	
Capital Reef Nat'l Park, Utah		X	X	X	X	X	X	X			X
Carlsbad Caverns Nat'l Park, New Mexico		X			X			X		X	
Cedar Breaks Nat'l Monument, Utah			X	X	X						
Channel Islands Nat'l Monument, California		X		X	X		X	X		X	X
Colorado Nat'l Monument, Colorado		X		X	X	X	X				
Crater Lake Nat'l Park, Oregon		X	X							X	
Death Valley Nat'l Monument, California	X				X	X	X	X		X	
Delaware Water Gap Nat'l Rec. Area, N.J.		X	X	X	X	X	X	X		X	
Devil's Tower Nat'l Monument, Wyoming							X	X			X
Everglades Nat'l Park, Florida	X			X	X		X	X		X	
Glacier Nat'l Park, Montana		X	X		X	X	X	X			
Glen Canyon Nat'l Rec. Area, Utah & Ariz.		X		X	X		X	X		X	
Great Smokey Mts. Nat'l Park, N.C. & Tenn.	X	X			X	X	X			X	
Guadalupe Mts. Nat'l Park, Texas				X	X			X			
Katmai Nat'l Monument, Alaska										X	
Lassen Volcanic Nat'l Park, California								X			
Lava Beds Nat'l Monument, California						X		X			
Lehman Caves Nat'l Monument, Nevada		X			X					X	
Mammoth Cave Nat'l Park, Kentucky		X		X	X			X		X	
Mount McKinley Nat'l Park, Alaska		X			X		X	X		X	
Mount Rainier Nat'l Park, Washington					X	X		X		X	
Ozark Nat'l Scenic Riverway, Missouri	X			X	X						X
Rocky Mountain Nat'l Park, Colorado		X			X	X	X	X		X	
Shenandoah Nat'l Park, Virginia		X				X	X	X	X	X	
Timpanogos Cave Nat'l Monument, Utah		X				X	X	X		X	
Virgin Islands Nat'l Park, V.I.				X	X		X	X			
Voyageurs Nat'l Park, Minnesota				X	X					X	
Yellowstone Nat'l Park, Wyoming			X		X	X		X	X		
Yosemite Nat'l Park, California					X			X		X	
Zion Nat'l Park, Utah		X	X	X	X		X	X		X	

SOURCE: Table and categories constructed from data in National Parks and Conservation Association. "Shortchanging the National Park System: Natural Areas." Environmental Journal (February 1976): 11-16.

in the definition of public use has paralleled this growth. In its Public Use of the National Park System, 1872-2000, the Department points out that the concept of public use in legislation has evolved from "resort and recreation," through "park or pleasuring ground for the benefit of the people," through "inspiration and benefit" provided by historical areas, through "various forms of public outdoor recreation in recreational areas," and concluded with "outstanding opportunities for solitude or a primitive and unconfined type of recreation in wilderness areas."47/

In spite of increasing use and an expanding mission, the National Park System has received few additional resources under the budgetary constraints of the 1970's. Instead, the creation of numerous new national parks in recent years without complementary authorizations for added personnel has had the effect of diluting programs and slowing down park administration and maintenance. To determine where lack of enough funds or personnel have impinged on visitor enjoyment or resource management, the National Parks and Conservation Association (NPCA) conducted an extensive field survey in 1975 of its trustees and correspondents, and of national park superintendents and other interested citizens. The result was the publication of two articles on "Shortchanging the National Park System" that described in numerous, brief case studies the shortcomings of our natural, historic, and recreation areas.48/ In tables 4 and 5 categories are constructed on the basis of the NPCA data in order to aggregate the needs of the National Park System and to demonstrate how job creation projects could help to meet those needs.

JOB CREATION NEEDS
IN NATURAL AREAS

The most prevalent need uncovered in this considerable sample of our national parks is inadequate personnel. All but six of the 42 parks included in table 13 pointed specifically to a manpower shortage. but other frequently-mentioned problems reflected this deficiency too. Inadequate protection, particularly of the less-utilized portions of the parks, and lack of control over the considerable crowds now attracted to many of these locations were mentioned with regard to approximately half of the parks. A similar proportion mentioned inadequate general maintenance and the number pointing to inadequate preventive maintenance was not an encouraging preview of coming

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47/ Ibid., p. 35.

48/ National Parks and Conservation Association, "Shortchanging the National Park System: Historic and Recreational Areas," Environmental Journal (March 1976), pp. 9-14, and "Shortchanging the National Park System: National Areas," Environmental Journal (February 1976), pp. 11-16.

attractions. Over 70 percent complained of a lack of structural replacement and repair. The Forest Service indirectly acknowledged this situation when it wrote of the many new recruits to camping, but acknowledged that there were also rising numbers of "camping dropouts."49/

Job Creation Needs in Historic Areas

The Park Service owns many historic sites. Perhaps, inevitably, historic reconstruction and repair have remained low priorities for the limited National Park Service dollar. Table 14 indicates, however, that NPCA's survey again found that inadequate staff was the most prevalent complaint, and that lack of structural repair is widespread in the National Park System. Approximately one-third of the reporting historic and recreational areas mentioned inadequate protection--a particularly disturbing statistic, because many of the artifacts stolen cannot be replaced at any price. These significant historic sites provide a rare opportunity to alert Americans to our national heritage, and it is disturbing to find that one-third of the respondents complain of inadequate interpretative programs. Several parks also indicated that weekly natural history interpretation programs are discontinued during the winter months.

The needs of these historic sites are far from esoteric. The Assateague Island National Seashore area in Maryland and Virginia warned that failure to replace the old Chincoteague-to-Assateague Bridge could result in an accident. The Delaware Water Gap National Recreation Area has acquired hundreds of buildings, including several dozen historic structures, but its four-man maintenance crew cannot begin to cope with this magnitude of need. There is no effective fire control system within the Appomattox Court House National Historical Park--and many other examples could be cited. Before these historic sites are written off as the concern merely of a handful of academics or environmentalists, it should be noted that Department of Interior figures indicate that in 1966, over 50 million persons visited these

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49/ The individual details often tell the story more poignantly than the aggregate data. There are 300,000 visits made to the Schoodic Section of Acadia National Park in Maine, but only one park ranger is available, and vista clearing operations on turnouts and scenic overlooks have been postponed, in some cases for 10 years. Carlsbad Caverns National Park has sharply curtailed its surface nature walks and primitive cave tours. Curtailment of planned installation of new back country camping sites has resulted in overcrowding and destruction of established sites in the increasingly popular Everglades National Park. Park officials estimate that the catch-up maintenance, especially on roads and trails, that will eventually be necessary in Grand Canyon Park could double or even quadruple the cost of preventive maintenance--and perhaps as a fitting symbol that no national park is immune to these problems, NPCA reports that Old Faithful "is in a dire state of disrepair."

TABLE 14. JOB CREATION PROJECTS NEEDED IN NATIONAL HISTORIC AREAS

National historic areas	Overcrowding	Inadequate protection	Inadequate sanitation	Inadequate interpretive programs	Inadequate staff	Lack of preventive maintenance	Inadequate general maintenance	Lack of structural replacement and repair	Shortened season for full service	Lack of control	Master plan behind schedule
Allegheny Portage Railroad Nat'l Historic Site & Johnstown Flood Nat'l Memorial, Pa.		X			X	X		X			
Anderson Nat'l Historic Site, Georgia					X	X		X			X
Antietam Nat'l Battlefield Site, Md.		X		X	X	X	X	X			
Appomattox Courthouse Nat'l Hist. Park, Va.					X		X	X		X	
Bandelier Nat'l Monument, New Mexico					X	X		X			
Chesapeake & Ohio Canal Nat'l Hist. Park, W. Va., Md., and Washington, D.C.		X	X		X			X		X	
Chickamauga & Chattanooga Nat'l Military Park, Georgia and Tennessee					X			X			
Cowpens Nat'l Battlefield Site, S.C.		X	X	X	X		X				
Eisenhower Nat'l Hist. Site & Gettysburg Nat'l Military Park, Pennsylvania					X	X	X	X		X	
Fort Davis Nat'l Historic Site, Texas				X	X	X	X	X			
Fort Sumter Nat'l Monument, S.C.				X							
Fort Union Nat'l Monument, New Mexico				X	X			X			X
Fredricksburg & Spotsylvania County Battlefields Memorial Nat'l Military Park, Va.					X	X	X	X		X	X
Herbert Hoover Nat'l Historic Site, Iowa		X		X	X	X	X	X			
Hopewell Village Nat'l Historic Site, Pa.		X		X	X	X		X			
Jefferson Nat'l Expansion Memorial, Mo.				X	X		X	X			
John Muir Nat'l Historic Site, California				X	X		X	X			
Kennesaw Mountain Nat'l Battlefield, Ga.				X	X		X			X	
Kings Mountain Nat'l Military Park, S.C.		X						X			
Martin Van Buren Nat'l Historic Site, N.Y.											
Mesa Verde Nat'l Park, Colorado								X			
Mount Rushmore Nat'l Memorial, S.D.					X						
St. Thomas Nat'l Historic Site, V.I.					X						
San Juan Isle Nat'l Historic Park, Wash.		X			X		X	X			
Thaddeus Kosciuszko Nat'l Memorial, Pa.					X						

SOURCE: Table and categories constructed from data in National Parks and Conservation Association. "Shortchanging the National Park System: Natural Areas." Environmental Journal (February 1976): 11-16.

sites where "sightseeing for historical appreciation and walking was the predominant public use." 50/ In 1966, that figure compared with 46 million who visited the natural areas and 36 million who traveled to the recreational areas.

This pressure on localities, and the role that Federal job creation could play in alleviating it, are clear in table 15, which sets forth the considerable number of States in which localities and State agencies proposed projects in the field of recreational and sports development as early as 1964, in response to a Senate Committee on Labor and Public Welfare survey. Three-quarters of the States included at least one locality (and sometimes considerably more) advocating job creation projects related to the installation and expansion of recreational areas generally, and two-thirds specifically referred to the development of campsites, trails, or picnic areas. Twenty percent or more of the States also mentioned athletic fields, beach maintenance, boat ramps, and golf courses. Thirty percent proposed projects to construct or refurbish parking lots and barricades in urban parks and 92 percent outlined job creation efforts addressed to the more general topic of park development.

There are numerous job creation projects, then, that would enhance publicly-owned parks and recreational land, and these needed projects are well within the capabilities of unskilled and semiskilled unemployed individuals. A 1971 survey of the local park and recreation manpower situation by Hawkins and Verhoven identified 21 categories of occupations generic to the park and recreation field, and asked a stratified sample of 980 agencies the extent to which they used disadvantaged workers. The authors found that disadvantaged persons held 13 percent of the full-time and 25 percent of the seasonal jobs in the agencies that they contacted. More significantly from the standpoint of job creation potential, they determined that these persons held positions in all 21 categories, and that if the usual problems in hiring the disadvantaged, such as transportation, work attitudes, inadequate supervision, lack of equipment, and union problems were overcome, the potential could be considerably greater. 51/ But those hired need not in all cases be disadvantaged, and positions for unskilled or semiskilled persons could be designed on a seasonal or long-term basis, depending on the status of the economy.

50/ Ronald F. Lee, op. cit., p. 16.

51/ Donald Hawkins, Utilization of Disadvantaged Workers in Public Park and Recreation Services (Washington: National Park and Recreation Association, 1971), p. 76.

TABLE 15. PARK, MUSEUM AND RECREATIONAL JOB CREATION PROJECTS MOST FREQUENTLY PROPOSED BY STATES AND LOCALITIES

Projects	Number of States with localities suggesting this project 1/
Recreational and sports development:	
Athletic fields	12
Beach maintenance	14
Boat ramps	20
Campsites	33
Golf courses	11
Hunting areas	8
Installation and expansion of recreational areas (general)	38
Nature walks	6
Picnic areas and tables	34
Swimming areas	9
Trails (hiking, bicycle riding, horseback riding)	34
Winter sports development	6
Site improvement:	
Barbeque pits, grills, and fireplaces	12
City beautification	7
Historic sites	14
Lookout tower construction and maintenance	6
Park development	46
Parking lots and barricades in urban parks	15
Zoological gardens	5
Environmental education 2/:	
Conservation programs	1
Mapping	2
Museum exhibition work	2
Museum work (general)	8
Nature centers	2
Nature exploration	3

1/ Although localities in all of the States and some State agencies too responded to the Committee's survey, some of the replies were too general to allow a detailed breakdown. The number of States with localities intending to initiate a particular project may therefore be higher in some cases than these figures indicate.

2/ In the above categories, a project is not included unless it was mentioned four or more times. The projects in this category, however, are included because of their heuristic value.

SOURCE: Table and categories constructed from data in U.S. Congress. Senate. Committee on Labor and Public Welfare. Conserve Human and Natural Resources of the Nation. Hearings before the Subcommittee on Employment and Manpower, 88th Cong., 2d sess., 1964. Appendix, pp. 77-335.

Tutorial Training for Potential Problem Readers

The National Reading Center reports that one in 20 children is held back a grade each year, usually because of reading problems; that eight million school-children need special help in learning to read; and that almost half of the 2.7 million high-school students with reading difficulties receive no help in school. 52/ The Center's findings indicate that these reading deficiencies carry over to the world of work. Five million job seekers are functionally illiterate; one-third of all job holders are denied advancement because of reading inadequacies; and over 20 million Americans aged 16 and over are unable to read and understand at least 10 percent of the questions on such standard application forms as those for a driver's license or a personal bank loan. 53/

The reading problems of our youths are nationwide in scope, but have affected some groups more than others. Laffey and Perkins quote Federal estimates of severe reading problems that range from a low of 10 to 20 percent of the pupils in middle-class suburban schools to a high of over 60 percent of the disadvantaged population in our inner city schools. Half of these children are reading below their ability as well as their grade level. 54/ Former U.S. Commissioner of Education James E. Allen testified before the House Committee on Education and Labor in 1969 up to half of the students in large city school systems read below expectation. About half of the unemployed youths (aged 16 to 21 years) at that time were functionally illiterate, and three-quarters of the juvenile offenders in New York City were two or more years retarded in reading. 55/

52/ Carl B. Smith and Leo Fay, Getting People to Read (New York: Delacorte Press, 1973), pp. 1-3.

53/ Ibid., p. 2.

54/ James Taff[illegible] and Phillis Perkins, Teacher Orientation Handbook (Washington: National Reading Center, 1965), p.3.

55/ Quoted in Samuel Blumenfeld, The New Illiterates (New Rochelle, N.Y.: Arlington House, 19[illegible]), p. 18.

CURRENT STATUS OF READING ASSISTANCE PROGRAMS

Many local school systems have not chosen to publicly acknowledge student reading needs by going beyond the traditional classroom except through the hiring of a small number of reading specialists to deal with the most serious reading disabilities. A major reason for this institutional reticence is cost. Many subjects may be taught to large groups of students, but experience with reading problems suggests that even a group of five or six students may be too large to allow a child having difficulty to receive sufficient feedback and encouragement. As Blumenfeld points out, many slow-learning children require one-to-one attention to overcome their reading difficulties, 56/ but incremental budgetary changes simply will not allow local school systems to allocate the necessary resources.

The result is that the schools depend, for the most part, on limited and uncertain outside resources to aid problem readers. For example, HEW's Right-to-Read program, which grew out of the Elementary and Secondary Education Act of 1965 (ESEA), provided some worthwhile training materials for voluntary efforts, and developed a 16-hour training course for tutors, but was phased out in the early 1970's. Reading aides were funded under Titles I and III of ESEA, but funds for those activities are now considerably scaled down.

NEEDED: A PROGRAM TO DETECT AND CORRECT READING PROBLEMS EARLY

The payment of reading tutors is hardly a new proposal. Before the Industrial Revolution, as Blumenfeld has pointed out, children were taught in their own homes or in small school houses. The wealthy hired tutors not only to instruct their children in the skills of reading and writing but also, as John Locke wrote, the virtues of "sobriety, temperance, tenderness, diligence, and discretion." 57/

Paid tutorial training should be funded for children in the first through third grades. In this fashion, potential problem readers can be detected and aided well before much more difficult and extensive remedial education is necessary. Even during this relatively short

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56/ Samuel Blumenfeld, How to Tutor (New Rochelle, N.Y.: Arlington House, 1973), p. 9

57/ Ibid., p. 15.

period of three years, students manage to fall as much as a year or more behind, but the learning problems have not yet developed that later make it so difficult for the child and for the tutor.

These early years are also critical in enabling the young person to develop a foundation of attitudes and skills on which to build subsequent school achievement. Observers in the Cincinnati school system noted that children in need of reading help often exhibited a short attention span, little imagination, difficulty with unfamiliar items on a test, lack of ambition, and insufficient reading skills. Learning specialists regard the years from one through seven as vital in developing the child's capacity for learning and change, but the learning of language, concepts, self-impressions, and patterns of thinking does not require formal schooling. 58/ It is thus a more promising point of intervention for tutorial assistance than the later elementary and secondary years.

TRAINING OF THE TUTOR

The better tutorial programs differ considerably in their approach to the student, and hence to training the tutor, but they generally average 16 to 20 hours of preparation, and agree that the tutor must be supervised after he or she is on the job as well. The National Reading Center recommends a training program that provides the tutor with information on reading techniques and on working with children. Tutors are taught to use an "interest inventory" designed to discover what intrigues the child--this approach is also reflected in the emphasis of other reading programs such as Reading is Fun-damental (RIF) that stress the enjoyment that can be derived by the individual from reading, as well as its "fundamental" role in future success. Tutors are also taught the components of a daily lesson plan, how to work with the teacher in assessing the child's weaknesses in reading, and how to help the child use reading skills in various school subjects. 59/

However, Programmed Tutorial Reading (PTR), a project for first graders identified by the Office of Education (OE) as particularly successful in its work with disadvantaged students, emphasizes the

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58/ Ibid., p. 41.

59/ James Taffey and Phyllis Perkins, Teacher Orientation Handbook, (Washington: National Reading Center, 1965), pp. 6-8.

use of programmed texts and precise, programmed responses by tutors as a part of its approach. Western Michigan University' Department of Psychology emphasizes behavior modification and the use of a "token economy" in its approach to children with reading problems. But all of these programs emphasize in their training the need to provide warmth and encouragement in the course of working with children, who sometimes have never been praised at home for their efforts and can receive little assistance of this kind in the large classrooms that characterize our elementary school systems.

LINKAGES BETWEEN THE SCHOOL AND TUTORIAL PROGRAM

The tutorial program must work closely with the schools, but also maintain some distance from them. The impact of these institutions, particularly where reading problems are most heavily concentrated, is often mixed at best, and the use of tutors provides a rare opportunity to deliver educational services on other than a mass basis. It would be well to work through churches and other community organizations (with which the tutors or students may already be associated). In this fashion, the tutors might be able to work with the parents periodically, informing them of their children's reading needs and progress and showing them, where feasible, how they too could assist the child. While it would be advisable to hold most reading sessions in an alternative setting, the meetings might occasionally take place in the student's home.

The local CETA Council should designate the director of the program in order to enable local organizations to have a voice in the program, but the school system should have a veto over the appointment of an unacceptable candidate. The location of the program and the details of its design must be worked out jointly by the Council and school system in accordance with local needs and institutional conditions. (Insistence on such local coordination should be made a condition for funding.) Such coordination, in turn, should render it most unlikely that the schools will be able to redefine the purpose of these funds and utilize them elsewhere in assuaging the financial demand of the "bottomless pit."

Nontechnological Approaches to Improving Mass Transit

No segment of our mass transit system is more palpably in need of assistance than the railroads. The railroad industry indicates that there is a total of $7 billion in deferred maintenance and delayed capital improvements. Indeed, the plight of the railroads is grimly etched out in the Interstate Commerce Commission (ICC) response to a 1975 query by Senator Warren Magnuson on how the industry could use Federal funds for temporary job opportunities. 60/ The ICC recommended the creation of study teams to identify the running tracks of all Class I Rail Carriers needing restoration to normal traffic conditions and to inventory rail freight cars in need of repairs. 61/ But it is the repair, rehabilitation, and improvement of essential railroad roadbeds that constitutes by far the largest need of most rail lines, and it is on the job-creation potential of this national need that Congress has focused.

Inadequate maintenance plays a significant role in railroad woes. When hit by economic hard times, the railroads have elected, apparently by process of elimination, to defer maintenance. Rarely has a railroad later succeeded in clearing up the work that it postponed, and the result has been to set in motion a vicious downward spiral. The weakened track leads to more accidents and "slow time." These accidents do not create a public outcry, as they would in the case of airlines, because most involve the hauling of freight, but the financial cost of derailments and crashes is far greater than preventive maintenance. The national implications of deferred maintenance for the railroad industry can be seen in the 10,419 train accidents in 1974, a figure that represents a 260 percent climb since 1960. 62/

The slow speeds that the railroads must assume over deteriorated track--10, 20, and 30 miles per hour are not unusual--result in far greater overhead expenses that double and sometimes triple the cost of shipping freight and undercut the line's ability to deliver products on an acceptable time schedule where alternative modes of transportation are available. The downward spiral is likely to worsen in the years 1976 - 1981. Maintenance deferrals from the depression were largely erased by accelerated replacement during World War II. The life cycle of that material, according to the Trustee of the Lehigh Valley Railroad, is 30 to 40 years, and the coming replacement requirements are unlikely to be met in an industry that earned $700 million on revenues of $16.9 billion in 1974. 63/

60/ U.S. Congress, Senate Committee on Commerce and the Committee on Labor and Public Welfare, Stimulate Employment Through Railroad Rehabilitation Projects, 94th Cong., 1st sess., 1975, p. 54.

61/ Ibid.

62/ U.S. Congress, Senate Committee on Commerce and the Committee in Labor and Public Welfare, Ibid., p. 137.

63/ U.S. Congress, Senate Committee on Commerce, Railroads--1975. Hearings on Miscellaneous Legislation Dealing with the Branch Line and Rural Commuter Lines, Parts I and II, 94th Cong., 1st sess., 1975, pp. 828-31.

CROSSCOMMITTING JOB CREATION AND RAILROAD ASSISTANCE FUNDS

The introduction in 1975 of legislation designed to stimulate employment through railroad rehabilitation projects was particularly significant, because, while unsuccessful, it represented Congress' only conscious attempt in recent years to meet unemployment and another national need simultaneously. The contrast between the attitudes of some of the legislators who introduced or co-sponsored these bills and their attitudes towards CETA suggests the political potential of cross-commitment strategies. That contrast is most clearly seen in the case of a conservative, Senator James Buckley (R), who introduced the earliest version of the legislation and subsequently proposed an unsuccessful amendment that would have reduced CETA's authorization and appropriation by the $600 million the Senate bill would have authorized for railroad rehabilitation projects. Congressman John Heinz (R), who co-sponsored a House version, also viewed this proposal as "providing meaningful work at a time when so many job-creating efforts seem to be aimed only at raking leaves, sweeping streets, or shuffling paperwork." 64/ Liberal Senator Jacob Javits (R) emphasized that the proposal "represents a new combination of public service employment with a specific target universally agreed to be one of our country's most pressing substantive domestic ills," but it was another Republican Senator, Peter Domenici, who identified the broader implications of the bill in a colloquy with Senator Javits:

> . . .there are many economists who have been looking around for projects in this country to take the place of some of the income-maintenance exchange programs of this country which they call unproductive...I think this may be the beginning of a new look at public-service-type-jobs, public employment and public works and income-maintenance exchanges that we are becoming worried about in terms of how much is productive in our society and how much is not. Here is a perfect example of where we are going to use our tax dollars to do something the country desperately needs, as I see it, and pay the people well for doing so. (Congressional Record--Senate, May 16, 1975, pp. S 8543-S 8553)

64/ U.S. Congress, House Committee on Interstate and Foreign Commerce, Public Works Jobs on the Railroads, Hearing before the Subcommittee on Transportation and Commerce, 94th Cong., 1st sess., 1975.

EMERGENCY RAIL TRANSPORTATION IMPROVEMENT AND EMPLOYMENT ACT OF 1975

The bill would have authorized the Secretary of Transportation to make grants to States, local transportation authorities, railroads, and regional commissions to hire unemployed persons for railroad, roadbed, and facility repair or rehabilitation projects. In addition to the $600 million authorized for public jobs, $200 million was to be set aside in grants and loans for equipment and supplies. The Secretary of Transportation, with the advice of the Secretary of Labor, would make grants to areas of substantial unemployment where there were railroad beds and facilities that were an integral part of present and future regional and national transportation needs and where serious deterioration and safety hazards existed. Eligible rail lines would include those used by Amtrak or other rail passenger services to a substantial degree; those included in plans developed by the U.S. Railway Association; those subject to track usage of at least five million gross ton miles per year; and those identified by State, regional, or local authorities as essential to State or regional transportation needs. Laid-off right-of-way and maintenance workers would have first priority in receiving these jobs, followed by those covered under CETA provisions who had exhausted their unemployment insurance benefits or had been out of work for at least 15 weeks.

The Association of American Railroads (AAR) estimated that, in 1975, beyond the maintenance work that the railroads would normally do, the industry needed to lay down 2,470 miles of new replacement rail and an additional 2,100 miles of second-hand but usable track made available by the laying of the new rail. Through this "cascading" effect, material would be efficiently utilized, and greater labor-intensiveness made possible. Where new rail was ordered, AAR argued that the grants would stimulate labor indirectly in the steel mills, tie plants, and quarries. 65/ There seems little doubt that track meeting the specifications of the legislation could have been found, since $800 million would only provide maintenance funds for 1½ percent of the railroad track in the country. 66/ President Stephen Ailes of AAR testified that these projects would involve 7,200 workers, and an additional 6,300 employees could install approximately 13 million

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65/ U.S. Congress, Senate Committee on Commerce and the Committee on Labor and Public Welfare. Stimulate Employment . . ., op. cit., p. 107.

66/ Ibid., p. 102

cross-ties. Ballasting and surfacing could occupy 2,600 project participants, and as many as 45,000 persons might be needed for spot and yard surfacing, crossing repairs, refurbishing of structures, brush removal, and minor track repairs--a figure well in excess of the 40,000 job slots that Congressional staffers estimated that the bill would provide at the proposed funding level.

PIGGYBACKING ON PUBLIC SERVICE EMPLOYMENT

There is little doubt that railroad rehabilitation would help to meet a national need, but the proposed bill also demonstrated the difficulty in maintaining a balance between meeting a national need and helping the unemployed, since some provisions at least bordered on providing "railroad revenue sharing" funds. Part of the difficulty is that much track rehabilitation involves extensive automation and expensive material and supplies. Estimates vary, but one sponsor of the legislation stated that for every one dollar spent on maintenance and upgrading of yards, the railroads would have to spend two dollars on rails, ties, and crushed rock. 67/ The President of AAR corroborated that figure, but argued that secondary maintenance could be performed that would bring that ratio down to 1:1. The legislation provided only one dollar for materials for every three dollars in labor, and, at this funding level, that ratio would probably not pose much difficulty, since railroads in some cases had materials on hand for which they had already committed funds. A relatively small labor-intensive program could be put in place quickly provided that the railroads did not gamble that the Federal government would eventually pay for the materials if they did not prematurely order them.

THE HIGH LABOR COST OF SALVAGING THE RAILROADS

Thanks to the necessity of paying union scale, the average cost per maintenance job would be considerably higher than the average CETA position. The relatively skilled positions would range between $12,000 and $14,000, while the less skilled jobs would pay between $10,000 and $12,000. When overtime and fringe benefits are included, however, the average salary of $15,000 calculated by the Senate Committee on

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67/ U.S. Congress, Senate Committee on Commerce and the Committee on Labor and Public Welfare, Stimulate Employment. . ., op. cit., p. 65.

Commerce is probably realistic. Perceptions of the functions to be performed by these persons appear to differ, however. On the one hand, industry spokesmen conveyed the impression that sufficient equipment is available and enough experienced railroaders could be rehired to perform critical maintenance functions. On the other hand, Senator Javits' expectations on what could be accomplished with available funds and labor seem considerably less ambitious: "The nature of the emergency work required on our Nation's railroads is ideally suited to the public service jobs approach. These projects, unlike basic rail line improvement work, do not lend themselves to highly mechanized equipment and methods..." In Senator Javits' view the tasks would be limited to "replacement of individual segments of worn rail, replacement of ties, leveling and straightening short stretches of track, restoration of signal systems, repair of grade crossings and repair of wayside facilities." 68/

Rehabilitation of Economically Viable Housing

Federal housing policy has edged towards rehabilitation and away from new construction in the wake of critical reaction to urban renewal, FHA scandals in Wilmington, Baltimore, Detroit, Philadelphia, and other cities, the recession, and the apparent impossibility of luring private sector funding into ghetto areas with the incentives available under current legislation. Indeed, the definition of rehabilitation itself has undergone some change since the cautious but optimistic days when "residential rehabilitation" meant primarily urban redevelopment. 69/ Experts emphasize that there are numerous levels of possible rehabilitation, or upgrading of property, that range "from the elimination of code violations to the complete remodeling or redesigning of floor layouts, and the replacement of major mechanical and structural components." 70/ But Federal policymakers have come around to more limited rehabilitative strategies less out of conviction than for lack of an alternative. The Center for Urban Policy Research thus seems

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68/ Congressional Record--Senate, May 16, 1975, pp. S8544-45.

69/ M. Carter McFarland and Walter K. Vivrett, Residential Rehabilitation, (Minneapolis: School of Architecture, University of Minnesota, 1966).

70/ David Lisotkin, Robert Burchell and Virginia Paulus, Housing Rehabilitation: Restraints, Prospects and Policies, Exchange Bibliography No. 356, (Monticello: Council of Planning Librarians, 1973), p. 3.

accurate in characterizing the Federal embrace of urban homesteading (and other relatively "light" rehabilitation strategies) as a "stability mechanism of the last resort, an effort not to prevent urban neighborhoods from changing, but to prevent them from drowning." 71/

The lowering of official expectations was accelerated by the failure of the private sector to succeed where public policy had failed. When confronted with a combination of risk, decreasing profitability, and the loss of potential owners who are willing to invest in slum properties, as housing expert George Sternlieb contends, "It takes a highly insensitive individual to become a professional non-resident owner of slum property, in the light of present societal attitudes." Furthermore, "When the apartment market is very strong the landlord need not improve; when the apartment market is very weak the landlord fears for his investiment and does not improve." 72/

IDENTIFICATION OF SUITABLE HOMES FOR VARIOUS LEVELS OF REHABILITATION

Experience with rehabilitation projects has resulted in a literature that spells out with increasing precision the circumstances in which limited rehabilitation cannot succeed or where the improved housing simply would not justify the cost. The type of building material and quality of the electrical and plumbing facilities must be considered. Economist Morton Schussheim stresses the importance of the age and design as well as the condition of the home. Neighborhood factors must also be analyzed, and these figure prominently in the levels or stages of rehabilitation developed by writers such as Hughes and Bleakly and McFarland and Vivrett. 73/ "Nonviable neighborhoods" are characterized by high vacancy rates, a high welfare population, wholly inadequate municipal services, numerous environmental health problems, and high population density.

Limited or light rehabilitation is still possible, however, where a deeply-rooted citizenry can be identified to serve as an anchor for the neighborhood. Older ethnic groups and elderly persons living in public housing may be present, along with lower-middle class groups

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71/ James W. Hughes and Kenneth D. Bleakley, Jr., Urban Homesteading (New Brunswick, N.J., Rutgers University, 1975), p. 5.

72/ George Sternlieb, The Tenement Landlord, (New Brunswick, N.J., Urban Studies Center, Rutgers, The State University, 1966), pp. 225-26.

73/ James W. Hughes and Kenneth D. Bleakly, Jr., op. cit., and M. Carter McFarland and Walter K. Vivrett, op. cit.

who are making substantial efforts towards homeownership. Even here, however, Hughes and Bleakly point out the rehabilitation strategies must take into account economic, population, and employment trends. 74/

Experience has revealed, too, that limited rehabilitation cannot be of the "clean up, paint up, fix up" variety; it must be sustained. "One shot" rehabilitation attempts, no matter how commendable the motive, do not yield long-term results.

Sustained rehabilitation, even where suitable housing candidates are selected, often costs more than anticipated, and economist Jerome Rothenberg seems justified in concluding that effective rehabilitation must be coordinated with effective code enforcement efforts and liberal credit. 75/ In spite of such unanticipated costs, economic analyses now find that rehabilitation by small groups or individuals is not necessarily more expensive than the strategy favored by HUD in the late 1960's of relying on large construction companies capable of achieving economies-of-scale through rehabilitation projects of ambitious scope. These economies-of-scale have yet to be proved, and small companies are able to provide the immediate on-the-job answers needed in rehabilitation. 76/

THE NATIONALIZATION OF LOWER-INCOME HOUSING

As urban blight has worsened, a wave of housing abandonments has swept through inner city areas. In New York City alone, 180,000 homes were abandoned between 1960 and 1968, and critics agree that the rate of abandonments has increased in the 1970's. Unwilling or unable to meet their financial obligations, more and more landlords have simply walked away or permitted the city to acquire such properties through tax delinquency procedures. Even where tax problems do not exist, ownership of abandoned property often reverts to a city, country, or Federal agency which must then figure out what to do with it. The result of this large-scale abandonment is that the two largest

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74/ Op. cit., pp. 59-60.

75/ Jerome Rothenberg, Economic Evaluation of Urban Renewal: Conceptual Foundation of Benefit-Cost Analysis, Studies of Government Finance Series (Washington: Brookings Institution, 1967), p. 243.

76/ D. Gordon Bagby, Housing Rehabilitation Costs (Lexington, Mass.: D.C. Heath Co., 1973), p. 41.

homeowners in virtually all of our inner city areas are now the local and Federal governments. No one in the private sector is accusing the government of "creeping socialism," because no one wants to assume this social responsibility, but the transfer of ownership is significant in scope and import. 77/

URBAN HOMESTEADING

In these circumstances, it is not surprising that government and its critics alike have turned to a partial housing solution that, as Hughes and Bleakly observe, has a "unique local noninstitutional orientation, with prime emphasis not on a centrally directed bureaucracy but on the individual fortitude of American households." 78/ Urban homesteading allows the individual to "purchase" his or her building from the government for a nominal amount. Driven by the lure of home ownership, the individual borrows the money needed for materials and supplies, but primarily invests the "sweat equity" necessary to rehabiiitate and maintain the home. It is in the individual's interest to restore the home to code standards. After the minimum period of time that the person agrees to reside at the location, usually five years, the house is deeded to him or her, and it is returned to the tax rolls. The individual thus gains a valuable asset, and the government sees a drain on its resources transformed into a part of its tax base. Occupancy also discourages the vandals and arsonists who are inevitably attracted to abandoned structures, adds to the housing stock at prices accessible to persons often frozen out of the real estate market, and curbs the urban blight that otherwise comes to neighborhoods where homes are abandoned. 79/

Whatever the romantic appeal of "go urban, young man," the Center for Urban Policy Research has found that the lure has attracted comparatively few takers. In three cities that were among the first to begin experimenting with the concept--Philadelphia, Wilmington, and Baltimore--approximately 200 families have become active homesteaders. Urban homesteading requires considerable sophistication about how to proceed, as well as effective support systems. White finds that it works "best in: (a) large metropolitan areas with an older housing

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77/ Harold M. Rosen, The Black Ghetto: A Spatial Behavioral Perspective McGraw-Hill Problems Series in Geography, Edward J. Taafee, Series Editor (New York: McGraw-Hill, 1971), p. 44.

78/ Hughes and Bleakly, op. cit., p. 1.

79/ Ibid., p. 2.

stock; (b) States where property tax and local-governmental finance laws can be adjusted to fit the homesteader's needs; (c) areas where there still remains some remnant of 'pride in the community'; and (d) areas where building materials and methods do not prohibit rehabilitation." 80/ Moreover, unlike earlier homesteading attempts where growth potential and future habitability were almost assured by the trends of the times, urban homesteading is an attempt to redistribute population in a manner which counters the direction of market forces. 81/

THE INCENTIVE OF HOME OWNERSHIP

Although the number of urban homesteaders remains relatively small, the focus on the individual owner as a major actor in the housing game is a welcome departure from earlier housing policies that placed decision-making responsibility in the hands of public agencies, large contractors, and nonprofit corporations whose accomplishments remain at best uneven. As lawyer Julian Levi has pointed out, "neighborhood decay is the product of hundreds of private decisions made by property owners over the years as to the maintenance and operation of their structures." 82/ If currently-threatened neighborhoods survive it will because individuals have made the decision to participate in their rehabilitation and renewal.

URBAN HOMESTEADING THROUGH JOB CREATION

The continuing recession in the construction industry is so serious and well-understood that it requires no documentation here. The result is a high unemployment rate among the skilled construction workers who are best equipped to perform housing rehabilitation. If these individuals could be put to work on those abandoned homes that have the greatest potential for rehabilitation, progress could be made in saving urban dwellings and dealing with rural housing problems too. HUD cannot now sink more money into homes already mortgaged unsuccessfully once, homesteaders are reluctant to invest in relatively high-risk homes and neighborhoods, and private contractors have no vested interest in defending a moderate income housing market that the housing industry itself has abandoned.

80/ Anthony G. White, Urban Homesteading: A Bibliography, Exchange Bibliography, N. 719 (Monticello, Council of Planning Librarians, 1975), p. 2.

81/ Hughes and Bleakly, op. cit., p. 37.

82/ McFarland and Vivrett, op. cit., p. 27.

Given the particularly serious stakes for our urban areas, however, the Federal government could utilize public jobs monies for housing rehabilitation, especially if there is some incentive that would make it in the personal interest of the construction worker for such rehabilitation to succeed. The construction workers could be paid a minimum wage for the time spent on the job, and the difference between that amount and the prevailing union wage could be given in the form of materials and supplies to be used in the rehabilitation. If and when the home was then sold, the construction worker could receive that difference in the form of a lump sum payment. In the event that the home could not be sold, the worker would not receive the cash, although he could have the option of choosing to live in the home himself.

The cooperation of the unions in such an arrangement would clearly be a prerequisite to implementation. Federal payment of the normal construction wage, plus $5,000 to $7,000 in materials and supplies, in an attempt to salvage high-risk housing is patently unacceptable as a job creation strategy, and cannot be justified as a substantial housing investment piled on yet another housing investment that went sour. Unlike the urban homesteader, the worker here would risk no money of his own, and would not be obliged to live in the home if he could sell it. The wage would hardly be attractive, but once unemployment compensation is exhausted, the income would provide the means of making it on a short-term basis, and the opportunity for a lucrative sale might provide at least some form of deferred gratification.

PSE VS. REHABILITATION OF ABANDONED HOMES

Rehabilitation can involve only those homes that are structurally sound and in neighborhoods that can still be saved. Construction workers anxious to make money presumably can be counted on to pick the winners, leaving the remaining homes for demolition or land banking. It remains an open question whether lower-middle income residents will be willing even under these conditions to purchase rehabilitated homes, but this infusion of human capital by the Federal government would considerably lower the sale price, and thereby provide members of the "working poor" with what for many may be their first and only opportunity to own their own homes. Just what financial arrangements would be made under these circumstances is a question, but the range of $5,000 to $7,000 per home is low, and must be compared with the costs that HUD is now incurring in the case of these abandoned homes.

There is some evidence that the building trades unions and contractors are becoming more willing to approach rehabilitation in a different manner than they do normal housing operations. On February 5, 1976, seven of the major AFL-CIO building and construction trades unions and the National Housing Rehabilitation Contractors Association met with then-HUD Secretary Carla Hills, and agreed on a plan to stabilize and strengthen the Federally-assisted or -insured rehabilitation of housing. The agreement stipulates that the signers will establish a procedure for developing wages and conditions unique to the rehabilitation of existing housing, limiting costs and keeping profits to reasonable levels.

It is unclear whether the union and contractors would sanction the type of public jobs project described here, but the 1976 agreement does suggest a willingness to listen and cooperate that was not evident in the 1960's. We must try to move beyond the winterizing and home repair activities to which CETA was limited through statutory restrictions, and utilize the greater flexibility of a job creation approach to deal with more basic rehabilitation problems.

Conclusion

There are some promising signs that the concept of job creation may virtually be forced to undergo significant revision in the years ahead. In its first Annual Report, the National Commission for Manpower Policy stated that "new forms of job creation need to be explored." Congressional realization of the need to explore income transfer alternatives stems in part from one of the most significant labor force developments of the 1970's--a series of stopgap legislative measures that pushed the cost of unemployment insurance above $17 billion during the last fiscal year.

Some economists have examined a broader form of job creation essentially as a countercyclical strategy designed for use during a recession, while the National Commission for Manpower Policy has spoken of using "soft" public works or community development efforts to meet the job needs of the long-term unemployed. But is it true that anti-poverty programs for the disadvantaged and counter-recession programs for the temporarily unemployed should be separated out, and is it true that it is inefficient to attack both kinds of unemployment through the same job creation program? Such a differentiation seems premature until we have a broader idea of what a more comprehensive job creation effort might include. For the same reason, the question of public vs. private sector involvement in job creation should be postponed. What is to be done must dictate who is to do it.

THE RIGHT TO COMBINE REQUIRED TRAINING WITH PUBLIC JOBS PROGRAMS

A dilemma runs through much of the discussion concerning the nature of a PJP. On the one hand, if disadvantaged persons are treated separately and paid relatively low wages, then they are little better off than if they take the sporadic short-term employment that is already available to them in the private sector. On the other hand, if they are given PSE jobs at regular wages, the Federal government has then increased inflation and brought about inequities in the labor market.

Separate job creation projects remove union pressures in the public sector to drive up the wages of these temporary employees (provided that the projects truly do not substitute for work that would otherwise be done by regular employees). Still, if the wage is pitched above the level of income maintenance programs but below the wage level paid in the primary labor market, what is in it for the worker? The answer must lie largely in the training provided to the worker while he or she is involved in the program.

EEA and CETA titles II and VI devoted little attention to coupling job creation with training. The economic justification for this omission was that the addition of training would add considerably to the cost per placement. Furthermore, State and local administrative agencies were clearly uninterested in providing such training, because it would absorb organizational energy in teaching workers who, in most cases, would not remain long in these jobs. But it is the development of human capital that is one of the ultimate aims of public employment efforts, and the program constitutes a valuable contact point during which employment assistance can (and, in fairness to the temporary employee, should) be provided. Such training can relate to the work at hand, but where that is unnecessary, it might be furnished in a totally unrelated field with growth potential. Such educational preparation clearly is a more solid basis for a transition than even a well-intentioned promise by an agency to absorb the employee when the Federal funds are discontinued. Furthermore, a training requirement, by placing an additional burden on the applicant, would presumably sort out some of those persons with whom the job may be less important. Since there clearly will be fewer available jobs than applicants, it provides a measure of intensity of need and thus a more equitable basis for selecting the job recipient--and while the training may be unrelated to the job, there is a tangible payoff for undergoing the training.

ATTRACTING A WIDER CONSTITUENCY FOR AN EFFECTIVE EMPLOYMENT POLICY

In addition to incentives for doing an effective job, there must be disincentives for "goofing off." There is no reason why a person should not be fired from a project if performance is unsatisfactory, provided that suitable safeguards are developed to protect the worker on a job creation project from inadequate training or unsuitable work. There appears to be in the minds of many Americans the impression that behavior on a Federally created job is irrelevant, since the tasks constitute "make work" anyway. Enforcement of standards of excellence and establishment of a series of incentives, duties, and obligations should make clear to employed Americans that there are responsibilities to be met here, too, and to unemployed Americans that they will benefit personally from participation in a PJP and that the product of their labor will benefit the society economically and socially.

If we guarantee a job, without simultaneously taking steps to insure that an important social need is being met, then we are indeed implying that the job is expendable. Robert Solow has pointed out that "The single most important step toward full or fuller employment would be for most of the society to want it enough." 83/ Separate and distinct job creation projects that involve persons working and studying their way out of structural, and in some case countercyclical, unemployment while meeting needs widely viewed as having a high priority and characterized by measurable outputs should provide a viable basis for building that constituency.

83/ "Macro-policy and Full Employment," in Eli Ginzberg, ed., Jobs for Americans, (Englewood Cliffs, N.J.: Prentice-Hall, 1976).

IV

JOB CREATION: IDENTIFYING APPROPRIATE TARGET AREAS

by

William Spring and Others

The papers in this section--after a historical background on public job creation in the United States--examine the current labor force and the subgroups that a public jobs program might affect. Separate papers identify five areas of potentially effective action: Housing, Day Care, Health Professions, Mass Transit and Railroads, and Parks and Recreation. Costs and number of persons served are also developed in these papers.

IV

Job Creation: The Historical Background

by William Spring

Remembrance of the fact that the WPA could put three million people to work a year through the worst of the Great Depression is important in understanding the commitment of those backing Federal job creation today. But it is also very important to recognize how different are the economic circumstances of the 1930's and the 1970's.

Then unemployment was massive--affecting an estimated 25 percent of the labor force in 1933, and perhaps still as much as 17 percent in 1939. Job creation was designed as a substitute for relief. Recipients had to be poor. Jobs were limited one to a family. Wages were so called "security wages" (about 90 percent of prevailing rates) and the work-week was short. Finally, all WPA programs, from the building of La Guardia Airport to the writers' projects, were operated by the Federal government directly.

In contrast, the Federal job creation programs of the 1970's (at least until implementation of the Title VI(B) amendment of CETA) have not been restricted to the poor and have paid prevailing wages for the performance of regular jobs.

Now, however, massive job creation is once again a topic for debate--job creation, that is, for the poor in employment outside of regular government payrolls and at low wages, as part of a welfare reform proposal now under consideration by the Administration.

How we got to this point is the subject of this brief historical review. The following papers will discuss specific areas with potential for job creation.

Supported by a series of studies of the problems of unemployment and poverty--including the reports of Kerner Commission on Civil Disorders and the Commission on Automation Technology and Economic Growth--the concept of public jobs for the poor gathered strength during the 1960's. The Office of Economic Opportunity commissioned a study by Greenleigh Associates, Inc., which determined that there were millions of potential jobs that such a program could fund. A 1966 study of inner city joblessness by Labor Secretary W. Willard Wirtz also documented the severity of the problem.

But the one effort to enact Federal job creation for the poor into law came in September of 1967, after the riots in Detroit, Newark and other cities. Senators Robert Kennedy and Joseph Clark led the effort in Congress, but, with the Administration opposed, it was easily defeated.

It was not until 1970 that a Democratically-controlled Congress, with strong support from big city mayors and the AFL-CIO, pushed through job creation legislation as part of the manpower reform bill. The bill was vetoed by the Republican Administration, but an important new instrument was created; a congressional coalition in support of job creation in the form of additional money to hire workers for State or municipal payrolls. The idea was to provide access to careers in the public sector--which was then undergoing rapid expansion--for those who had been excluded from the economic mainstream.

Public job creation did not actually get underway, however, until 1971, when national unemployment had been at about 6 percent for half a year. Moreover, the Emergency Employment Act of 1971 (EEA) was not aimed at the disadvantaged; rather, it allowed anyone who was unemployed to have a chance at jobs on State and municipal payrolls. The 140,000 jobs created under EEA hardly made a dent in the unemployment rate, but they did demonstrate once again the practicality of direct government creation of public jobs on a fairly large scale.

By 1976, there was rising concern in Congress that: (1) jobs under the CETA program were not being made available to those most in need and (2) that cities and States were substituting CETA workers for those they would have paid for otherwise out of local taxes. These concerns led to the enactment of CETA Title VI(B), which requires a project approach rather than placement of workers in regular jobs and mandates the hiring only of the poor and long-term unemployed.

The Comprehensive Employment and Training Act of 1973 included a continuation of the public service employment program. PSE was listed as an eligible activity under Title I, and Title II provided special funds for job creation in areas of high unemployment--over 6.5 percent.

After national unemployment rose from 5 percent to 7.2 percent in the year following CETA's passage, Title VI authorized $2.5 billion for job creation and an additional $500 million for project jobs was authorized under a new Title X of the Economic Development and Public Works Act. Together, these amendments led to the creation of some 380,000 jobs.

A number of questions are raised by any large scale job creation proposal. What work is to be done? How can it be organized? What levels of pay would be needed? How would those jobs match the skill levels of the unemployed?

The answer to the basic question--is there enough work to do?--depends on the national goals set by policy-makers. For example, if it is national policy to slow the rates of economic growth and allow high rates of unemployment--for whatever reason--then the goal of full employment, of course, cannot be reached.

It is critical to realize in this context that an Administration can eliminate more jobs by cautious fiscal policy than Congress has ever voted for public service employment. And, on the other hand, growth of the economy at an annual rate of 7.6 percent in March 1976 created an additional 300,000 jobs--nearly as many in a month as six years of legislative efforts have created through publicly-funded employment.

Full employment requires: vigorous fiscal policy; targeted urban redevelopment spending (including funds for housing and mass transit); capital institutions to help local businesses (development banking); and a project-oriented public service employment effort. If properly coordinated, these policies, it is hoped, could lead the Nation toward maximum employment with minimum inflationary impact.

However, if it is believed that full employment is unobtainable without unacceptable inflation, then there is no magic in public job creation. Targeted jobs are simply *less* inflationary than stimulation efforts directed at the entire economy.

Normally, jobs are derived from the demand for final products: for example, how many teachers are needed in order to provide one teacher for every 20 children? How many sheet metal workers to build the air ducts for 1 million units of low-cost housing? How many nurses to maintain health centers in each low-income neighborhood?

But what if the government spends money to create a job and only afterwards considers what that job will produce? As it happens, there is excellent evidence of the value of the investments made in this Nation by the job creation efforts in the 1930's. National Airport in Washington and La Guardia in New York, the plays of Clifford Odets, and the State guide series are but a few items in the long list of WPA contributions.

A serious look at the extent of unemployment and low wage employment in this Nation indicates that the "job gap" is far more substantial than is generally recognized. If, for instance, we were to mount a Federally-funded job creation effort offering jobs at the average wage of these unemployed under CETA ($7,800 per year), it is reasonable to expect that some 20 million workers could be drawn to them, including some 8 million currently working part-time and some 10 million now employed full-time.

The question is, can this be accomplished? The contributors to this portion of the monograph have taken a look at a number of fields in which it is said that there are opportunities to provide jobs and have attempted to answer these questions: how many jobs could be created? What wages do they pay? How are they currently organized? What barriers are there to their inclusion in a full employment effort?

The conclusion reached can be stated quite succinctly: In the service area (health, education, day care, care for the aged and institutionalized) there are a substantial number of jobs--new jobs, necessary or at least obviously-useful jobs, jobs that are now carried on in one place or another and pay decent to very good wages. However, there is nothing approaching an unlimited supply of such jobs. Moreover, with the possible exception of custodial jobs, they require substantial amounts of skill training.

In the area of production jobs--in railbed rehabilitation, urban transport, new home construction, home rehabilitation and park maintenance and recreation construction--there is an extraordinary amount of work to be done. But, in new home construction and in mass transit construction and maintenance, union wage scales (which, because of the Davis-Bacon Act, would almost surely be applied to any large scale job creation program) would create serious problems of overall costs and of equity, problems unknown in the WPA days.

If eligibility for Federally-funded jobs is limited to those who are heads of two or more member-households, who have a previous attachment to the workforce, and who have been unemployed (that is seeking work and not finding it) for 30 days or more, it would be possible to find sufficient work in such projects to make the difference between, say, a national unemployment rate (exclusive of youth unemployment) of 6 percent and 3 percent (say 2.5 million jobs). However, this could not be carried on indefinitely. At some point, the backlog of available work would be exhausted and we would again be faced with the necessity of relying on a growing economy to provide jobs for our citizens.

Perhaps even more importantly, production jobs require capital investment. To build forest hiking or biking trails, for instance, requires a 2½ ton truck for every so many miles of trail, making the cost of such efforts somewhat higher than they appear to be at first glance.

During the most recent recession, which was far more severe than the dip of 1971-72, the Congress has contemplated a number of job creation approaches:

--a general tax cut

--expanded public service employment

--emergency small-scale public works

--accelerated public works

--a counter-cyclical increase in revenue-sharing funds

None was intended to "solve" the unemployment problem, nor did any (with the exception of the tax cut) make a very large dent in the economy. It is my conclusion from this study of the problem, that the best hope lies in a return to the combination of programs suggested by FDR in his 1945 State of the Union Message: an integrated assault on concentrated unemployment and economic lag in inner city areas and regions, through the investment of Federal funds in a combined private- and public-sector effort to use all the Nation's resources in such a way as to achieve balanced growth and full employment. Public job creation can be an important part of this effort, but it cannot be the main effort itself.

The Labor Force Impact of a Public Jobs Program

by Thomas Berocci

Two questions are commonly and justifiably asked whenever the idea of a public jobs program comes under discussion. The first centers on the potential impact of such a program on labor force participation and the second on possible displacement of persons from the "less desirable" to the "more desirable" publicly-funded jobs.

This section of the analysis addresses these questions, employing as much information as is available at this time. 1/ It is useful to indicate at the outset that there are no precise estimates of the number of persons who would be drawn into the labor market or who would switch jobs in response to a government offer of employment. This does not preclude intelligent and calculated guesstimates, however.

This section also addresses the problem of determining what proportion of "officially unemployed persons" would be likely candidates for a jobs program. In many ways this proportion is easy to estimate, since the relevant data are statistically reliable and are published on a monthly basis. In order to estimate the possible pool of applicants for a public jobs program the following elements must be considered:

1. Those persons currently counted as unemployed (CPS) in excess of a given number, say 4 or 4½ percent, who are "frictionally unemployed."

2. An estimate of the number of discouraged workers who want jobs, but are not actively seeking employment because they believe no work is available, lack the necessary experience or schooling, or have personal handicaps (including inexperience and age) which may make them unattractive to employers.

3. The number of currently-employed family heads or unrelated individuals who worked in the previous 12 months (more than 50 weeks) but whose earnings were less than the offered wage under the jobs program (either the $5,038 BLS poverty level or the $7,800 target of CETA).

4. The number of currently-employed household heads whose earnings in the previous year were less than the offered wage level as a result of part-time or part-year work. (Not all of this cohort would want or accept a full-time job).

1/ Unless otherwise specified, the source of income data in this analysis is the Current Population Survey of the U.S. Bureau of the Census and the source of employment data is Employment and Earnings, January 1976.

5. Those persons who are not now part of the labor force (excluding the discouraged workers counted above) who would be drawn into the labor force in response to the job program. Loosely described as the "added workers" estimate, this can be obtained by using econometric techniques to predict changes in the labor force participation rate and by employing data published in the Current Population Survey.

CURRENT LABOR FORCE AND SELECTED SUBGROUPS

Before attempting to identify the members of the full-time work force who might be drawn into a public jobs program, it is useful to outline the situation of the labor force as a whole, with emphasis given to those sub-groups who would be obvious candidates for a public jobs program.

In December 1975, the civilian labor force totalled 92,731,000, including 85,536,000 employed and 7,195,000 unemployed, which translates into an official unemployment rate of 7.8 percent. Of those officially counted as unemployed, 3,486,000 represented the "excess" unemployed, i.e., above the number who would be jobless if the national rate was 4 percent (full-employment level). Further, as of December 1975, there were 59,812,000 persons 16 years of age and over who were not in the labor force--presumably, part of this cohort could be "drawn into" the labor force if the publicly-funded jobs were attractive enough.

Since public jobs programs generally have an eligibility requirement concerning the length of time the applicant has been unemployed, it is useful to present information on the duration of unemployment. Approximately 35.4 percent of those officially unemployed in December 1975 (2,548,000 persons) were unemployed for more than 15 weeks. Of this total, 1,428,000 persons were unemployed for more than 26 weeks, the duration of most State "regular" unemployment insurance coverage. The long-term unemployed (those jobless for more than 26 weeks) include 372,000 white collar workers, 784,000 blue collar workers, 190,000 service workers, and 74,000 persons with no previous work experience. If the "professional and managerial workers" are subtracted from this total (on the assumption that they would be much less likely to apply for a public jobs program), we find that there are 1,318,000 persons who would be immediately available for work if a public jobs program were implemented with an eligibility criterion of more than 26 weeks of "official" unemployment.

The CPS also classified part-time workers by their reason for part-time employment. The relevant category of this analysis is "part-time for economic reasons," a cohort which is not included at all in the unemployed classifications. The number of such workers given for December 1975 by the CPS is 3,028,000; certainly a number of these persons are likely to apply for a public jobs program which offered full-time work at levels of pay at least equal to their present earnings. (This calculation excludes those who are part-timers for "voluntary reasons.")

The next important category is that defined as "discouraged workers," those persons who have dropped out of the labor force because they "think they cannot find a job," either because of "job market factors" or "personal factors." In December 1975, the total number of discouraged workers was 972,000 persons--approximately 1 percent of the total labor force. Some members of this cohort could be expected to "reenter" the labor force if a publicly-funded job were available.

An additional piece of information that is most startling and possibly very important in our estimation is provided by the CPS information collected by asking those persons who are out of the labor force what their "work-seeking intentions" are for the next 12 months. Almost 10 million persons who were officially out of the labor force in December 1975 indicated that they planned on seeking work during the next 12 months. As a caution, the reader should remember that many who are presently in the labor force would drop out (for a variety of reasons) over the same 12-month period. Furthermore, the cohort of "discouraged workers" discussed earlier is included in the estimate of those who will enter the labor force during the next 12 months.

Table 16 shows a summary of the figures used in the above section.

EARNINGS OF WORKERS IN 1974

As mentioned previously, some workers who are earning less than the wages offered under a public jobs program could be expected to leave their present jobs to obtain better-paying publicly-funded positions. The extent of this movement, of course, would be dependent on both the wage level offered in the public jobs and the program's eligibility criteria, especially in reference to the number of weeks of previous unemployment, family status, or income provisions. The following section outlines some of the numerical parameters that should be used in estimating the possible displacement of workers from private to public sector jobs. Unfortunately, the most recent available data on earnings are for 1974 and thus are not directly comparable to the employment and unemployment data used in the preceding section. For purposes of estimation, the reader can assume that the percentage figures will hold over the 1975 period. (Note: this is a "conservative estimate," given the evidence that the "poor" suffer proportionately more in recessions like that of 1975. Thus, it is expected that the lower-income cohorts would have increased during the 1975 period.)

Persons Below the Poverty Level

According to the BLS definition of poverty-level income ($5,038 in 1974 for an urban family of four), there were 5.1 million families and 4.8 million unrelated individuals below the low income level. 2/ This represents a 7 percent increase over 1973 and thus we can expect that the numbers in these categories have risen in 1974 as well. The incidence of "poverty" was, as expected, greater among women. The poverty rate in 1974 was 33 percent for families headed by women and 6 percent for families headed by men. These income figures do include transfer payments and thus must be viewed carefully when making assumptions about availability for work.

Of the cohort of persons defined as living below the poverty level, the most obvious portion that might be expected to seek public jobs consists of those who worked full time during the year and still earned less than a poverty-line income. The CPS shows that there were 5.4 million persons who worked at least 50 weeks and still could not pass the poverty line, including 2.9 million family heads. 3/ This cohort was not included in measured unemployment and most certainly can be added to the total number who could be expected to look for work under a public jobs program (but not, however, if the program paid less than $2.50 an hour, since this is the average wage for those who worked full time and could not break the poverty barrier.)

Income Under $8,000

If the program were to offer positions which paid in the "target" range of present PSE positions under CETA ($7,800 per year), we would expect to see a substantial increase in the number of potential applicants. The Consumer Income Series of the Current Population Reports provides valuable information on this issue.

In 1974, 14.5 million civilian families had an aggregate family income, including transfer payments, of under $8,000 (26.5 percent of all civilian families in the U.S.). This figure becomes even more dramatic when one considers that the 1975 BLS lower-level family budget (4 persons) for a large city (Boston) was just a few dollars under $10,000.

Not all of those who earned less than $8,000 were unemployed during 1974. Of those families which were headed by a person who worked full-time (50-52 weeks), 3.6 million had a yearly income under $8,000, while the remainder of the families in the under-$8,000 category consisted of 1.7 million whose head worked part-time and 6.3 million whose head did not work at all. The portion of this cohort that worked full or part-time must be viewed as potential applicants if the program were to pay better wages than they earn in their present positions.

2/ P. 60, No. 102, Table B.

3/ C-60, No. 102, Table 12.

Part-Year Employment

It must be anticipated that at least some of the persons who desire and are unable to find full year employment would be responsive to the availability of a full-time, full-year position. In 1974, there were approximately 38 million persons who worked only part-year, including 18 million men and 20 million women. Of this total, 10.4 million did not work full year because they were unable to find work, while the remainder were either ill, disabled, in school, keeping house, or not working for "other reasons." Furthermore, of this group, 70 percent of the males (12.6 million) and 93 percent of the females (18.6 million) earned less than $7,000 during the full year. 4/

If the public jobs program has no "family income" criteria, a possibly more-relevant figure is provided by the 11.7 million persons who worked full-time (50-52 weeks) in 1974 and earned under $8,000.

ECONOMETRIC ESTIMATION

The State of Massachusetts now has an operating econometric model which is "driven" by the Data Resources Inc. (DRI) macro-model of the U.S. economy. One of the primary values of this model is that it can be employed to simulate changes in government expenditures, as illustrated by the following description of the results of a simulation designed to estimate the impact on the State economy of a $10 billion Federally-financed jobs program. The primary value of the simulation for our purposes is the presence of sophisticated employment equations in the model which allows for estimation of the labor force participation impact of a large "one shot" increase in the number of available jobs.

In order to derive the estimates, several simplifying assumptions were utilized:

--The entire program is financed by an increase in Federal income taxes, not through an increase in the deficit;

--Program participants are assumed to have exhausted their unemployment compensation benefits;

--The State of Massachusetts is allocated 4.5 percent of the national funding, the same percentage it now receives under Titles II and VI of CETA.

4/ The reader should be cautioned that these persons are included in the "official" unemployment rate. Although the cohort does not remain the same size over the entire year, its relative magnitude remains fairly constant.

--The average annual salary is assumed to be $7,800--the target average under CETA.

--It is assumed that there is a sufficient excess supply of labor so that the employment increase does not exert an upward pressure on wages. (The D.R.I. model indicates that upward pressure on wages would come with a program of $20 billion or or more.)

--It is assumed that the public jobs will not displace private sector jobs.

--It is assumed that the State and local governments will not have to increase their expenditures to provide material and equipment.

The major effects of the program are in the following areas: job creation, unemployment reduction, personal income, State revenues, State spending, welfare expenditures and labor force participation rate. Each is briefly discussed.

The program would initially increase employment by 62,000 jobs--58,000 directly and 4,000 indirectly--and the unemployment rate would decline by 1.8 percentage points. However, as a result of increase in the labor force, the decline in the unemployment rate would only be 1.2 points at the end of two years.

There would be an initial increase in personal income of $473 million, "multiplying" to $645 million by the end of two years, and State revenues from income, sales and other taxes would increase by $45 million in the first year. Further, welfare expenditures (for SSI, AFDC and General Relief) would decrease by $28 million, reflecting a decline in caseloads.

The Massachusetts econometric model includes labor force equations that incorporate empirical research results of changes in economic conditions on "discouraged" and "added" worker impacts. The equation estimated that the $10 billion program would, after 2 quarters, result in a .7 increase in the labor force participation rate (moving from 66.1 percent to 66.8 percent). Thus, in Massachusetts (with a "potential" labor force of approximately 4 million persons), we find that about 28,000 or about 41 percent of the 68,000 new jobs (in 1977) would be taken by persons entering or reentering the labor force. It must be kept in mind that this number of labor force entrants and reentrants includes those who were out of the labor force as a result of the collection of transfer payments of one kind or another.

If this same percentage increase occurred on the national level (total labor force in 1974 = 93.24 million) we would find an increase in the labor force of (.007 x 150,827,000 non-institutional population)

1.055 million persons. [5] The reader must remember, however, that the equations on labor force behavior for Massachusetts may not apply on the national level. Further, the simulation was designed for a hypothetical $10 billion public service employment program. Nevertheless, it gives a good estimate of the potential impact of an injection of a substantial number of new jobs on labor force behavior.

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[5] This estimate comes very close to the number of discouraged workers in 1974 (972,000 according to the Census estimates).

TABLE 16. LABOR FORCE SUMMARY STATISTICS, DECEMBER 1974 AND DECEMBER 1975

Item	December 1974	December 1975
Total labor force (thousands).......	93,539	94,888
Civilian labor force (thousands)....	91,327	92,731
Number employed (thousands).........	85,220	85,536
Number unemployed (thousands).......	6,107	7,195
Labor force participation rate......	61.8%	61.8%
Unemployed as percent of labor force	6.7%	7.8%
Number unemployed in excess of 4% of labor force..................	2,454	3,486
Population over 16 years of age, not in labor force (thousands)...	58,482	59,812
Duration of unemployment (thousands):		
27 weeks.........................	472	1,428 (thousands)
15 weeks.........................	1,151	2,548
Mean.............................	10.3 weeks	16.9 weeks
Unemployed 27 weeks, by occupation:		
White collar.....................	---	372
Blue collar......................		784
Service..........................		190
No previous experience...........		124
Total........................		1,318
Persons working part-time for economic reasons (thousands).....	3,097	3,028
Discouraged workers (thousands).....	812	972
Not in labor force but planning to seek work in next 12 months (thousands).....................	9,544	9,879

SOURCE: Employment and Earnings, January 1976.

Employment Opportunities in Housing under a Public Employment Program

by Linda Seale

Although residential construction has kept pace with targeted gross housing production goals since 1969, units for low- and moderate-income families have not been constructed at the rate necessary to provide adequate housing for all Americans by 1980, and the rate of rehabilitation of existing stock has been negligible. A system of financial incentives could be used to stimulate private rehabilitation and construction efforts to meet these goals, but an alternative approach, consistent with the goals of a public employment program, would be to provide Federal funds to local governments and public housing authorities to hire the manpower necessary to build and rehabilitate housing for low-income families.

DEMAND

According to projections made in 1968 and 1973, there will be 5.1 to 6.7 million units of deteriorated housing in the United States in 1980. 6/ Forty percent of these units will be located in metropolitan areas, with a regional distribution as shown below:

Northeast	Northcentral	South	West 7/
1.4 million	2.2 million	2.9 million	.9 million

Virtually all households living in these units will have low or moderate incomes.

An estimate of the amount of Federally-sponsored rehabilitation which has already occurred can be obtained from the number of FHA single- and multi-family mortagages issued under Sections 235 and 236 of the National Housing and Urban Redevelopment Act of 1968. Only 130,000

6/ David Birch, America's Housing Needs: 1970-1980 (Cambridge, Mass: Center for Urban Studies of Harvard and MIT, 1973); and A Decent Home, Report of the President's Committee on Urban Housing (Washington, D.C.: U.S. Government Printing Office, 1968).

7/ Birch, op.cit.

mortgages on refinanced and existing construction were issued between 1968 and 1973. 8/ (This number might tend to underestimate the amount of rehabilitation which has occurred, since it does not include financing of leased-housing rehabilitation under Section 23. However, by including the refinancing of existing mortages and improvements to non-substandard dwellings, it might also tend to overestimate.) As an upper bound, the total number of low-rent public housing units in 1973 was about 1.3 million, including all conventional public housing units and all leased housing. 9/ Assuming that no more than one-third of that number represent leased units which have been rehabilitated, (a very conservative assumption; in Boston less than 1 percent of all public housing units were leased, rehabilitated structures in 1973), 10/ at least 4.5 to 6 million of the 1970 stock of deteriorated units are still in need of rehabilitation.

A 1970 estimate of American housing needs indicated that 6.4 million households not living in physically-dilapidated units were, nonetheless, "housing poor" because they either lived in overcrowded conditions or paid a disproportionate fraction of their incomes for rent. 11/ American housing needs, therefore, include both rehabilitation of substandard units and economic assistance to families who are overcrowded or unable to afford a market-determined rent. Of 63.4 million households in the United States, 13.1 million are housing poor. Yet only 2 million households (of 25 million potentially eligible under existing laws) benefit from Federal housing subsidy programs. 12/ A public employment program could be used to narrow that gap by providing funds to local housing authorities to build or rehabilitate units which would then be provided at less than market cost to families eligible for housing assistance.

8/ 1973 HUD Statistical Yearbook (Washington, D.C.: U.S. Government Printing Office, 1973).

9/ Ibid.

10/ Arthur P. Solomon, Housing the Urban Poor (Cambridge, Mass.: MIT Press, 1974).

11/ Birch, op. cit.

12/ Solomon, op. cit.

JOBS CREATED BY NEW CONSTRUCTION

In a study of the employment benefits of new construction, Solomon estimated that for every $1,000 of construction cost, 95.9 man-hours of on-site labor is required at an average wage rate of $6.08 (1970 dollars), generating $583 in wage income. In addition, 122 hours of off-site construction activity is created at a mean wage rate of $3.78, for a total of $461. Some fraction of this amount--perhaps $70-$100--is paid out as construction wages to clerks, draftsmen, etc., for a total wage expenditure of $650-$685. The rest represents the wage component of materials and services used in the building. Using Solomon's figures, the total employment on- and off-site benefit from construction is $1,004 per $1,000 construction cost. 13/ There is some discrepancy here, presumably reflecting the fact that these data come from many sources and must all be adjusted to constant dollars, but the conclusion is unquestionably that construction is highly labor-intensive.

In addition to creating short-term construction jobs, public housing construction creates permanent managerial and maintenance positions. For projects numbering 500-800 units in Boston, for example, new jobs were created at the rate of 1 per 17 housing units, at an average salary of $8,640. The average capital cost per unit of construction was $17,070 for these projects; annual operating expenses were $930, of which at least $508 was for wages and salaries. 14/ Such a program would create a total of about 2.3 workyears per unit of housing built, including 1.2 workyears directly in wages paid by the government and the rest to workers in industries manufacturing materials.

For every million units of housing constructed, then, 1.2 million workyears would be required, and there would be another 1.1 million workyears in increased private sector employment. Some 59,000 permanent managerial and maintenance jobs per million units would also be created.

JOBS CREATED BY REHABILITATION

HUD defines rehabilitation in its leased housing program as a substantial alteration in the premises which costs 20 percent or more of the fair market value of the unit. Costs may range from $2,000 to over $10,000; for the 731 leased housing units that Solomon looked at in

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13/ Ibid.

14/ Ibid.

Boston, the average capital cost of rehabilitation was $8,412. 15/ A similar figure of $8,743 per unit was the average for FHA-insured multi-unit projects (both figures in 1970 dollars). 16/

Rehabilitation of existing units is less labor-intensive than new construction, since it requires only 80.4 work-hours per $1,000 of construction costs. The average prevailing wage rate for the mix of construction skills required was $6.01 for Solomon's 731 units. Assuming the same ratio of off-site to on-site employment as for new construction, rehabilitation would create about 102 additional man-hours at $3.78. 17/ In reality, the amount of work created may be greater than these figures would indicate, since rehabilitation requires more finished products manufactured off-site than new construction. However, using the new construction ratio as a reasonable approximation, direct wage expenditures for rehabilitation would be $540 to $570 per $1,000 of construction costs, including wages to off-site construction workers. For an average rehabilitated unit in Solomon's sample, this results in direct employment expenditures of $4,540 to $4,800 per unit. In addition, permanent administrative, management, and maintenance jobs are created by the annual operating expenses of $1,068 per unit. 18/ Assuming that the proportions of this figure devoted to labor and materials are comparable to those for new construction, $583 per unit is for payment of wages and salaries, and the result is one permanent job for every 15 units.

The number of workyears needed to rehabilitate one dilapidated unit is .53. To rehabilitate 4.5 to 6 million units of substandard housing would require 2.4 to 3.2 million workyears. In addition, 300,000 to 400,000 new permanent jobs would be created.

AVAILABLE LABOR SUPPLY

Although there were 5.5 million persons employed in construction in 1973, only 5.0 million persons were so employed in 1975. 19/ The average annual unemployment rate in construction in 1975 was 18.1 percent or 830,000 persons, 20/ enough to build 690,000 units of new

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15/ Ibid.

16/ 1973 HUD Statistical Yearbook, op.cit

17/ Solomon, op.cit.

18/ Solomon, op.cit.

19/ Employment and Earnings, January 1976.

20/ Ibid.

housing annually or 1.6 million units of rehabilitated existing stock. In addition to unemployed construction workers, approximately 700,000 persons with no previous work experience were without jobs in 1975. 21/ Since 30 to 40 percent of rehabilitation work can be done by semi-skilled or unskilled workers, it might be possible to employ a million or more persons in rehabilitation and new construction without special training programs. 22/ (This does not include an almost equally-large increased private demand for labor stimulated by the building activity.)

The number of persons with experience or skills in the construction trade may be even larger than the above figures indicate. In 1968, 6.4 million individuals worked in construction at some time during the year, filling 3.6 million full-time positions. 23/ Since 1968 was a year of low unemployment in construction, this suggests that, even in high employment years, the ratio of possible construction workers to persons actually doing construction work is probably about 1.8:1. Individuals apparently move freely from construction into related employment areas, so that an effort to recruit workers from other areas into construction work could provide jobs for even more people than the number estimated above.

PROGRAM ALTERNATIVES

There are several financial and ownership alternatives which the Federal government could adopt in implementing a public employment program in housing. Assuming that government should engage in this traditionally private-sector activity only to achieve public purposes, new construction would be most appropriately designated for low-income households and the elderly. Since programs already exist to subsidize the construction of such developments, what would be required to implement a public employment program to undertake new construction would be increased funding, a means of encouraging local community housing authorities to expand their existing programs, and increased reliance on public employment rather than hiring of private contractors.

Several existing HUD programs provide possible means of implementing projects:

1. Under Section 23 of the Housing Act of 1965, the Federal government funds local housing authorities to lease housing units for public housing recipients from the existing housing

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21/ Ibid.

22/ Solomon, op.cit.

23/ D. Quinn Mills, Industrial Relations Manpower in Construction (Cambridge, Mass.: MIT Press, 1972).

stock. The local housing authority must require that leased premises satisfy the local housing code; in addition, the local housing authority may enter into a long-term lease with the landlord, and the income thus guaranteed provides the landlord with the incentive to rehabilitate the units leased. The guarantee also facilitates the acquisition of capital to reconstruct the unit. Ownership of the leased premises remains with the landlord; the tenant and the Federal government share the increased rental costs of the more valuable rehabilitated housing.

2. Section 236 of the National Housing and Urban Redevelopment Act of 1968 provides rent supplements, coupled with FHA mortgages, for new construction or for rehabilitation of units for low-income families by private, non-profit corporations.

3. Section 235 of the same act provides similar mortgage subsidies to low-income homeowners and to private corporations.

Another type of program which could be implemented on a large scale is urban homesteading. Such a program would allow households to purchase dilapidated buildings and rehabilitate them with a zero or minimal down-payment and possibly with Federal subsidies for mortgage payments like those currently made under Section 235. In a variant of this scheme, tried on a limited basis in Cambridge, a non-profit corporation buys dilapidated units, does the major rehabilitation work, then sells the properties to moderate-income families who do the inside finishing work. The value added by the household in completing the rehabilitation serves in lieu of a downpayment for obtaining a conventional, unsubsidized mortgage. 24/

None of these rehabilitation programs uses public employment to perform the rehabilitation services. All of them, however, could be easily adapted to include public employment, with the value of services rendered partly replacing the rent or mortgage subsidies. Alternatively, merely providing the funding to undertake these programs on a large scale would increase private sector employment. Thus, these existing programs could be implemented either as public employment programs or as stimuli to private construction employment.

24/ Interview with Mel Gadd of Homeowners' Rehabilitation, Inc.

START-UP TIME

A realistic estimate of the lead time necessary to start a public employment housing rehabilitation program is probably 6 to 12 months. Given the high unemployment rate in the construction trades, extensive worker training appears unnecessary, since skilled labor is already available. Existing programs can provide many of the guidelines and operating procedures necessary to implement such a plan. The steps necessary to begin a rehabilitation program would include the following:

--certifying families as eligible;

--finding units available for lease or purchase and negotiating contracts;

--inventorying what needs to be done in each unit;

--matching housing and households;

--developing operating procedures for each type of improvement;

--hiring and training supervisors in operating procedures;

--hiring rehabilitation teams; and

--educating existing local housing authorities about the program, setting up new local authorities where necessary, and hiring additional administrative personnel to direct the program.

New construction, on the other hand, requires a much longer lead time in order to acquire sites, design projects, have them approved, and begin construction. Also, once a construction project is begun, it cannot be terminated quickly, in contrast to rehabilitation projects, which typically involve only a few units per dwelling and can be completed in a month or two. Thus, if one goal is to expand and contract public employment rapidly in response to fluctuating private-sector demand for labor, rehabilitation programs are better suited to that goal than large-scale new construction.

EQUAL OPPORTUNITY

A desirable characteristic of a public employment program would be the creation of new job opportunities for disadvantaged and minority workers, many of whom have no special skills. Surprisingly, construction offers many such opportunities. The proportion of unskilled and semi-skilled jobs available in new construction is about 23 percent, and in major rehabilitation 33 percent. In moderate rehabilitation, which requires very little structural, electrical, plumbing, or heating work, the fraction of workers who need not be highly skilled approaches 50 percent. 25/ Also, about half of the managerial and maintenance jobs created by public housing programs require only minimal skills. Thus, either through its direct employment practices or by influencing those of private contractors bidding on Federally-financed housing projects, it should be possible to improve employment opportunities for minority and disadvantaged workers with low skill levels.

PUBLIC vs. PRIVATE EMPLOYMENT

It should be noted that it is possible to rehabilitate substandard units and create adequate low- and moderate-income housing without creating any public employment jobs. A change in the interest rate, coupled with subsidies such as those offered by existing programs, could probably generate sufficient private construction activity to satisfy Federal goals and reduce unemployment. The advantages of relying on the private sector are two: first, privately constructed housing costs about 10 percent less than its public sector equivalent. Also, an approach designed to protect consumer autonomy in selecting housing in the private market while providing a rent subsidy to pay for it is likely to be the most effective way of avoiding poor quality in housing construction.

A public employment program, on the other hand, might be more effective in providing jobs for minority workers and could be more responsive to changes in the unemployment rate. It is even possible that the Federal government could vary the rate of public employment from region to region, in response to local changes in employment.

Initially, any housing program should concentrate on rehabilitation, rather than on new construction, because rehabilitation can be implemented more rapidly and discontinued more quickly. Also, its unit costs are approximately half those of new construction, with almost as favorable a ratio between wages and total cost. The choice of longer-run options, however, must be made in light of such interrelated policy questions as how to stabilize declining urban neighborhoods, how to generate adequate revenues for cities, how to provide jobs to the rural poor, and other issues beyond the scope of this paper.

25/ Solomon, op.cit.

Public Job Opportunities in Day Care
by Mary Cosgrove

Some of the factors influencing the increasing demand for full-time quality day care for children aged 6 years or less are outlined in the Massachusetts Early Education Project (MEEP): 26/

1. More women are entering the labor force every year to supplement family income and to build careers for themselves outside of the home.

2. Rising concern for equal opportunity has led to such programs as Head Start, which provide support and stimulus for the social and emotional development of enrolled children.

3. Many welfare reform programs include job training and paid employment, both of which require participating mothers to arrange day care. In addition, mothers who go off welfare to take a job face similar needs.

4. A fourth factor in the increasing demand for child care is a growing recognition of the importance of a child's first years. Child development research has shown that a healthy and stimulating environment is important for the social, intellectual and emotional development of a child. This makes child care important for the children, in addition to being convenient and necessary for parents.

The available data suggest that a large number of preschool children would be well served by expanded day care services. There is a need for full-time (8am-6pm) care for children whose mothers work (or would like to work), as well as for part-time care, infant care, after-school programs, bi-lingual programs, and care for special needs children. The potential demand for these services is great in residential neighborhoods as well as near work sites.

Evidence of the potential demand for full day child care can be recognized in the number of mothers who leave their children in other homes because of the hours required by a full-time job, and also in the long waiting periods required to get children into the good full day programs presently in existence.

26/ Richard R. Rowe, Child Care in Massachusetts: The Public Responsibility, Massachusetts Early Education Project (MEEP), February 1972.

According to the MEEP study, there are 4 important factors contributing to successful day care--that is, child care that meets the parents' and children's needs:

--It must be inexpensive relative to the family budget;

--It must be near the home, especially if more than one child is enrolled; or it must be near the parent's work site;

--It must be open for enough hours to serve the needs of the parents who work;

--It must have appropriate sponsorship, facilities, curriculum, and personnel.

DEMAND

According to the Department of Labor, there were 5.6 million children aged 6 years or less who had working mothers in 1971. Three years later, according to the Day Care Book, 27/ there were approximately 6 million children in this age group who had working mothers, an increase which indicates that there were approximately 6.5 million such children in 1976, of whom an estimated 1.35 million were in licensed group child care, plus another 2.5 million in family day care.

These estimates would indicate that out of 6.5 million children aged 0 to 6 years of working mothers, 3.8 million are accounted for in some sort of child care. The remaining 2.2 million children are probably in unlicensed day care centers, at home with adult supervision (latchkey children), or perhaps at home with father or siblings.

I am estimating that approximately 2 million children in this age group are in need of day care services. I reached this figure by assuming that many of the 2.2 million children unaccounted for above would be in the target population. In addition, some children in existing day care programs and family child care might shift into the target population if the programs established were more convenient, cheaper, or somehow better able to meet the needs of parents than their previous arrangements. I am assuming too, that more mothers of preschool children would enter the labor force if adequate day care were available and that some nonworking mothers might make use of day care if it were convenient and reasonably priced.

27/ Vicki Breitbait, *The Day Care Book: The Why, What and How of Community Day Care* (New York: Alfred A. Knopf, 1974).

It is estimated (in MEEP) that, in Massachusetts, 28 percent of all mothers with preschool age children usually work outside the home. It is also estimated that 16 percent of Massachusetts families, with approximately 100,000 children aged 0 to 6 years, experience "difficulty" setting up child care. If day care placement is "difficult" for 100,000 children in Massachusetts, and Massachusetts has approximately 3 percent of the national population, than a rough estimate of the number of children nationally whose parents have "difficulty" placing them in day care would be over 3 million. Again our estimated target population of 2 million children in need of such services seems quite believable.

COSTS AND STAFFING NEEDS

Costs

To get an idea of staff needs and costs for a child care center, I used two sample program models representing two sample budgets for small day care programs (25 children or less) in two different years, 1968 and 1971.

The 1968 data were drawn from a study done by the Day Care and Child Development Council of America and the then Child Bureau of the U.S. Department of Health, Education and Welfare. Their figures indicated an annual cost per child of $1,862 for an "acceptable" (average) program. Data from the 1971 study, by Abt Associates, shows an annual cost of $2,350 for a similar program model.

To estimate the cost per child for a similar program in 1976, I plotted these costs on a straight line graph and calculated the cost of an average full day child care program in 1976 to be $3,600 per child per year, or 53 percent more than it was in 1971. I then drew up a representative program model for 1976 based on the two given models and incorporating salaries and staffing needs. (See table 17.)

The projected program model indicates an annual cost per child of $3,803 which is not much higher than the $3,600 per child estimated from the graph. In addition, costs could probably be trimmed by assuming some "in-kind" contributions and donations of classroom space, educational and recreational materials, furniture, publicity, office supplies, etc., from neighborhood organizations, churches, parent groups, community chests, labor unions, industry, hospitals, universities, or whatever organization might benefit from the day care program or have an interest in children's and women's services.

Another possible means of cutting expenditures is through the use of volunteer help, especially parents helping out on tasks whenever possible. An additional staffing resource could be supplied by teenagers, through an NYC program, coming in after school to work and perhaps be trained.

Taking these resources into consideration, the figure of $3,600/child annually as the cost of "desirable" day care (providing more than custodial care) does not appear to be an unreasonable estimate of cost. Of course, some programs would not be as expensive as others, depending on location, need, resources used, donations received, and quality of curriculum.

Fees should probably be set on a sliding scale according to family income and the number of children from each family in a given program. Unfortunately, the costs of adequate day care are not usually covered by the fees paid per child. Currently, there are a number of Federal programs which provide assistance to day care, but we shall assume that these sources will not be available for expanding new programs.

The revenue, then, must be raised in other ways. Potential sources of support would include employers, community organizations, parent groups, children's services agencies, organizations, churches, schools, universities, labor unions, private industry, individual gifts and endowments.

Staffing Needs

Employing the same program model used above to project cost, as well as the estimate presented earlier of 2 million children aged 0 to 6 years requiring day care, I have generated the following figures on job creation:

Staff	Staff per 25 children	Staff per 100 children	Staff per 1 m children	Staff per 2 m children
Teachers	2	1	80,000	160,000
Assistant teachers	2	9	80,000	160,000
Aide	1	4	40,000	80,000
Director	1	4	40,000	80,000
Secretary	1/4	1	10,000	20,000
Cook	1/2	2	20,000	40,000
Nurse	1/10	2/5	4,000	8,000
Maintenance	1/4	1	10,000	20,000
Busdriver	1/4	1	10,000	20,000
Total	7.5	30	294,000	588,000

TABLE 17. PROGRAM MODEL FOR 25 CHILDREN, 1976

Item	Item cost	Total
Staff		
2 teachers	@ $10,000	$21,000
2 assistant teachers	@ 9,500	19,000
1 aide	@ 7,000	7,000
1 director	@ 12,500	12,500
1/4 secretary	@ 9,000	2,250
1/2 cook	@ 8,000	4,000
1/10 nurse	@ 10,000	1,000
1/4 maintenance	@ 8,000	2,000
1/4 bus driver	@ 8,000	2,000
		$70,750
Training	@ 10% salary cost	7,075
		$77,825
Non-Staff		
materials		$ 2,868
food and related		6,120
health		260
rent and utilities		3,800
communications-telephone, postage		600
bus-payment, maintenance		3,600
		$17,248
	TOTAL:	$95,073 $ 3,803/child/year

A program for 25 children should have approximately 7.5 staff members. For 2 million children, this would require 80,000 centers and approximately 588,000 staff; of these, 340,000 jobs would probably be considered non-professional and could accommodate workers who are relatively unskilled.

The positions outlined in the program model could be varied to a certain extent, as long as the adult/child ratio in the classroom at any given time meets minimum requirements. The standard classroom ratio for preschoolers is one adult for every five children. For example, the staff could be all full-time, or more people could be accommodated by having twice as many part-time positions; particularly assistant teachers or aides. Other positions could be staffed which were not mentioned in either of the above program models, such as bus monitors, parent workers, community outreach, bilingual workers, and any number or variety of consultants. However, the total cost of the program will obviously determine the staffing and it is doubtful that the budget of a day care program would exceed the estimates given.

In addition to these on-going jobs which deliver services to the children, there are a number of start-up tasks which would require short term positions, such as renovating and rehabilitating a building to house the center. This construction would provide immediate short-term jobs for a number of people. Assuming 2 million children in need of services and 25 children to a program, there would be approximately 80,000 centers. If two or three people were employed readying each center, some 200,000 immediate, short term jobs in construction could be created.

There would also be a number of positions available for professional and semi-professional staff in start-up consultations on local areas needs for day care, location of centers, publicity/recruitment, community relations, etc. Some of these functions could be performed cost-free by interested parents who have a vested interest in providing good day care.

Public Jobs in the Health Professions

by Hildy Simmons

The effort to identify and project allied health employment needs is constrained by two significant factors:

1. The training and licensure requirements of most recognized positions;

2. The lack of hard, verifiable data regarding the number of persons currently employed in the various positions encompassing "allied health personnel."

The first concern is central to any effort to identify potential jobs for persons with limited skills. In addition, information on the number of job openings available for allied health personnel is relatively difficult to obtain. Numerous positions fall within this category, but the growing trend toward professionalization (through training requirements and licensure) limits entry options. In recent years, greater emphasis has been placed on mobility within the field, but initial entry remains restricted.

The basic assumption behind the projected needs listed on the following pages is that initiation of some form of national health insurance would result in a substantial increase in the demand for ambulatory medical care. This means there would be a need to expand the supply of primary care physicians, as well as physicians' assistants and nurse practitioners. These positions, needless to say, require extensive training and are not applicable to the survey of entry-level positions. However, a nationwide increase in the demand for ambulatory care means that support positions would have to be filled as well. Two positions which would be directly affected are laboratory technicians and operators of sophisticated diagnostic equipment. While not requiring a bachelor's degree, these positions do require one to two years of training. A list of occupations defined as "allied health manpower" is shown in table 18, with information regarding training and education requirements, the supply of active, formally trained personnel and projections of future entrants into these occupations through 1990.

As previously mentioned, an overriding concern in identifying potential jobs within the health field is the substantial training needed before an individual can assume a position. The one type of position which requires significantly less training falls under the general classification of custodial care. These positions are often menial, however, and not attractive to most of those seeking employment.

TABLE 18. SUPPLY OF FORMALLY TRAINED HEALTH PERSONNEL AND PERCENT CHANGE, 1970, 1980, AND 1990

Occupation	Number of active formally-trained personnel			Percent change	
	1970	1980	1990	1970-80	1980-90
Dietitians*	15,300	18,170	22,340	18.9	23.0
Medical records administrator*	4,200	5,140	6,430	22.4	25.1
Medical technologist*	45,000	80,620	123,520	79.2	53.3
Occupational therapist*	7,300	11,760	16,880	61.1	43.6
Physical therapist*	11,550	23,030	36,570	99.4	58.8
Speech path. & or diologists*	13,300	37,070	70,930	178.8	91.4
Certified lab. assistant	6,700	22,260	41,160	232.3	84.9
Dental assistant	9,200	39,110	71,530	325.1	82.9
Dental hygienist	15,100	34,190	57,650	126.5	68.7
Dental lab. technician	1,600	7,070	14,290	341.9	102.2
LPN's	400,000	656,890	819,790	41.5	44.9
Respiratory therapist	3,850	10,510	18,810	173.0	79.0
Medical records technician	3,800	4,900	6,460	29.0	31.9
Occupational therapy assistant	600	4,360	8,820	626.7	102.3

*Requires at least baccalaurate level basic education.

SOURCE: National Certification Statistics.

Nursing homes represent a major area for employment expansion in the years ahead. As the population of the United States stabilizes and gets older, there will be increasing demand for institutions capable of providing custodial and other care for older persons. With the dramatic rise in the number of nursing homes in this country in recent years (nearly 30 percent between 1971 and 1974), they have come to rely heavily on nurses' aides (also known now as medical assistants) and licensed practical nurses (LPNs). Training for these positions ranges from three months (which can include OJT) for nurses' aides to 15 months to two years for LPNs. Although there is no accurate information on existing numbers of nurses' aides, it is reasonable to expect that the demand for such positions will continue to increase. The National Center for Health Statistics identified 400,000 active, formally-trained LPNs as of 1970 and projects entrants into this occupation at more than twice that number by 1990.

State medical institutions, particularly those for the mentally retarded, are also in need of workers to provide custodial care. Recent court orders in several States have highlighted the often-inadequate care provided in such institutions and it seems clear that increases in the numbers of nurses' aides and/or LPNs could improve the quality of the care provided. States, however, often have insufficient funds to hire such persons, so the positions remain unfilled. It should also be noted that these are traditionally-low paying, not always "rewarding," positions to which it is difficult to attract employees.

Mass Transit and the Railroads

by Harvey Berger

In the post World War II period, mass transit systems and the railroads have experienced a decline in public use. Despite the importance of highway mobility, however, mass transit and railroad systems are nearly four times as energy-efficient as motor carrier transportation, while generating substantially less pollution, and wasting fewer material resources. These benefits make the problems of the Nation's transportation systems well worth solving. This section will deal with the prospects for public service employment in both mass transit and the railroads.

MASS TRANSPORTATION

Declining ridership in big cities has resulted in an almost complete transfer of their mass transportation systems to the public sector. Medium-sized cities are also in the process of assuming control of their transportation systems, and smaller cities are even worse off, in most cases losing their systems altogether. Service cutbacks and declining employment have been typical in all three situations. Many observers claim, however, that service cutbacks in conjunction with the pressures created by strong unions have resulted in a condition of overemployment in some of the large systems.

Fixed-route transportation is highly labor-intensive, with wages, benefits and maintenance accounting for almost all operations costs. Union members do most of the maintenance, much of which requires skilled labor. High wage rates present another barrier to a public service employment program in this industry; in Boston, the average MBTA employee earned $16,800 in 1974, and only a small number of employees (significantly less than one hundred) earned under $14,000 per year.

Construction of new fixed rail systems is out of the question for a public service employment program because of the capital-intensiveness and high skill levels involved in such an effort. More feasible, however, is the institution of some form of "para transit" system, such as Dial-A-Ride. Para transit is even more labor-intensive than conventional systems and is potentially capable of providing thousands of employment opportunities. Para transit systems would be used mainly in small and medium cities, and low population-density suburbs, where they may be the only service feasible, or in large cities, where (if no transit unions object) they may be used as feeder lines to fixed route systems and as providers of special service for such transportation-dependent groups as the elderly and the handicapped.

If para transit attempts to compete with fixed routes, the unions may be protected under Sections 13(c) and 3(e) of the Urban Mass Transit Act of 1964. The former protects unions from loss of employment or representation rights, while the latter prohibits the use of Federal funds to compete with private bus operators. (Protection is restricted to "private mass transportation companies," excluding taxi companies). Further difficulties could arise when encountering State-legislated "buyout" clauses, which prohibit public authorities from competing with private enterprise.28/

A Federally-subsidized para transit system instituted as a anti-cyclical device would also experience difficulty in terminating public service employment jobs after a recession. The same labor intensiveness that makes para transit a good target for a public jobs program could generate wage costs high enough to make it impossible to maintain the system during economic upturns in the absence of a continuing Federal employment subsidy.

It is difficult to set up para transit systems large enough to meet the job requirements of a public service employment program without incurring other extremely high costs, which are related to the need to suit the varying requirements of each locality. The railroads, already established and possessed of a significant ability to absorb employment, provide a much more feasible vehicle for accomplishment of the aims of a public service employment program.

RAILROADS

The recent recessions have exacerbated the problems experienced by the Nation's railroad systems in competing with other modes of transportation. The result has been a continuing decline in freight revenues; in fact, much of the American railroad network is on the brink of economic and physical collapse. Although some lines are financially sound, a growing number are facing insolvency. Nine railroads, operating 17 percent of the Nation's track, were bankrupt as of May 1975.

Rising costs and declining revenues have severely limited the ability of most railroads to meet their financial obligations. Not since the Korean War has any line been sufficiently profitable to

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28/ The clause in the Santa Clara County, California act is typical: . . . before the district may establish any transit service or system which may at any time divert, lessen, or compete for the patronage or revenues of any existing system, the district shall--(complete) the purchase of the existing system . . . See Palo Alto-Menlo Park Yellow Cab Co. et al. vs. Santa Clara County Transit District et al. (1975).

raise capital through the issuance of common stock. The ability to borrow from banks or through debt issuances has also been limited.

As a result, most railroads have deferred maintenance of track and other physical assets, and have attempted to improve their financial situation by laying off employees. Maintenance-of-way workers have usually been the first to go, making it impossible to conduct a proper maintenance program.

Recently, it has become clear that there is a direct connection between railroad maintenance and railroad abandonment. The establishment of ConRail provides for abandonment of track which is too expensive to maintain and operate. Certainly, some of these abandonments are justified, but others are simply the product of a vicious cycle established by the railroads themselves, to cut their operating costs.

There is a high degree of correlation between the extent of deterioration in rail service in a geographic area, and the extent of unemployment in that region. An efficient rail system is an asset to a community in that it helps to hold onto existing industry and to attract new firms into the area. Conversely, without the railroad rehabilitation and improved service needed by many communities, these areas will remain at a disadvantage in competing for new industry and jobs. A revitalization of our rail system could help rejuvenate many economically-depressed regions of the country. However, it is certainly easier to transport the unemployed to the rail than vice versa. For this reason, an effort to limit such rehabilitation activities to high unemployment areas would be unproductive.

As of May 1975, the industry reported over $7 billion in deferred maintenance and capital improvements. Present estimates range as high as $15 billion. Assuming, for purposes of analysis, $10 billion worth of deferred maintenance nationwide, 50 percent to 60 percent of costs can be attributed to materials, and another 5 percent to equipment, leaving approximately 35 percent of the cost of deferred maintenance to labor. The further assumption may be made that approximately two-thirds of all necessary work will be done by the railroads themselves. This results in a rough calculation indicating that the potential for public service employment in the railroad industry approaches $1.5 billion. Including costs of $15,000 per person per year (wages of $12,000 per year, plus fringes and supervision) this could create 100,000 human years of employment. All of this employment can be related to the unskilled labor needs of deferred maintenance projects.

In addition to the obvious need for major roadbed rehabilitation, a long list of labor-intensive maintenance projects also should be undertaken. Projects of this type include track resurfacing, grade-crossing repairs, bridge repairs, brush removal, tightening of rail fasteners and refurbishing of structures. Cumulatively, these six types of project appear to represent over $700 million in deferred maintenance.

Included in the deferred maintenance needs are 52.4 million new ties, and 6 million tons of new rail. (There are currently 883.6 million crossties and over 40 million tons of rail in the roadbeds of the major U.S. railroads.)

If such amounts of labor and material could be put into the rail plant immediately, the plant could be returned to what might be regarded as standard condition, which means that the average crosstie has half of its full 35-year life remaining and the average rail still has 30 years of its 60-year life-expectancy. Thereafter, optimum normalized maintenance would necessitate the annual replacement of 25 million ties and 757,000 tons of rail.

Among the potential constraints on the implementation of a massive public service employment program in the railroad industry are the lack of roadway work equipment, scarcities of such materials as wood ties and steel, and the lack of qualified manpower.

Immediate restoration of maintenance work to a 1974 level would not create any serious shortages of roadway maintenance machines because such equipment is still readily available. Moreover, the sporadic nature of past work on some roads suggests that more efficient use of such equipment could be achieved.

Nevertheless, a full-scale increase in maintenance-of-way activities (i.e., to the point of using all available supplies) would necessitate some additional equipment. In view of diminishing backlogs of orders for such machinery, however, and the possibility of performing the least equipment-intensive projects while equipment is being delivered, it is unlikely that the equipment situation would cause major delays.

As new rail is laid in existing mainline, the removal rail is generally cropped, welded and relaid in another location on secondary, branch, siding, or yard tracks. Some of the rail removed from those locations is then reused in other locations and the rest is sold for scrap. (At 1975 prices, the salvage price for a mile of single track is $18,000.) This "cascading" process varies from road to road and with the condition of the trackage to be replaced, but replacing a mile of track with new rail generally results in an almost equal amount of track being upgraded with refurbished rail at little additional cost, except for labor.

The maximum capacity of the five mills presently producing steel rails in the U.S. is approximately 1.2 million tons per year. Railroads could plan on obtaining about one million tons, with the rest going for mass transit, export and other uses. Without increasing this capacity, the maximum output would permit railroads to increase their annual rail installations by about 50 percent of their 1971-1973 average and to almost double the rate for 1975. Importation is impractical, as domestic steel prices are in the area of $240 per ton, while comparable European prices range from $600-$800 per ton.

In fact, existing material supplies would permit the railroads to almost double their expected rail and tie installations for 1975, since they have on hand or on firm order 23.8 million crossties and 3,100 miles of new rail. Another 2,100 miles of second-hand rail are stockpiled for immediate use. These materials further enhance the railroads' ability to expand planned maintenance programs if adequate financing is available. Both programs would represent a major expansion over 1971-1973 levels, but they would have to be carried out over a long period to eliminate all deferred maintenance. In the case of a massive public service employment program, rail installation would be constrained by steel supplies, but other necessary maintenance-of-way projects could absorb the employment needs of the program.

The problems inherent in securing the qualified manpower necessary to increase rail maintenance to the point where all reasonably-available work can be done do not appear to be insurmountable. In September of 1975, the railroads' maintenance-of-way forces were down 7.2 percent from the September 1974 level of 90,272. Total employment in the industry dropped from 538,909 in September 1974 to 491,121 in September 1975, a decline of 47,788 or 3.9 percent. Therefore, most of the track rehabilitation programs outlined above could be undertaken with furloughed employees. Further, most maintenance-of-way workers are trackmen and machine operators who require little training beyond on-the-job experience. (Even the most extensive railroad training programs offer only two weeks of classroom instruction.)

Maintenance-of-way work has long been characterized by high turnover and strong seasonal fluctuations. Despite these drawbacks, railroads have not experienced any major difficulties in staffing maintenance-of-way projects--in part because salaries average about $12,00 per year for this type of work and because mechanization has eliminated much of the physical exertion once required in such jobs.

Unions have been quite enthusiastic about previous plans for public service employment programs in the industry. The goals of increased safety and of expanding the industry with improved performance have won endorsements from organized labor, qualified only by requests for payments of prevailing wages and priority for hiring furloughed railroad employees.

The Association of American Railroads has estimated that, beyond what the railroads are planning, the following programs are necessary and feasible within a one-year framework:

1. New Rail Installations in Existing Track $321.1m

   With 500,000 tons of new rail, accompanying track materials, and 3,900 more employees, the railroads could relay 2,470 miles of track. Total cost does not reflect the salvage value of old rail released by this project.

2. Relay Rail Installations in Existing Track $26.4m

   With salvaged and reuseable rail and accompanying track materials, the railroads could then relay 2,100 extra miles of track. Approximately 3,300 more employees would be required and the cost includes a credit for salvage of the rail and materials released from this project.

3. Tie Installations $236.9m

   These additional projects would require 13 million ties and 6,300 more employees.

4. Ballasting and Surfacing $83.4m

   Over 23,000 miles could be included and the labor requirements would call for 2,600 new employees.

5. Other Maintenance Projects $714.7m

   Spot and yard surfacing, crossing repairs, bridge repairs, refurbishing structures, brush removal, minor track repairs, etc., would require 45,500 employees at a cost of $675 million. The remaining amounts would be required for materials and transportation.

Thus, considering the known material, labor and equipment constraints, the total additional rehabilitation work which can be performed in 12 months would cost approximately $1.4 billion--split about evenly between major roadbed rehabilitation and other maintenance projects.

The highly labor-intensive "other" projects would be a one-time effort, but the remaining projects could be continued through the foreseeable future. In fact, they could be increased if the production of rail and other track materials were expanded.

SUMMARY: Annual Additional Programs -- (Costs in Millions)

Projects	Employees Required	Labor 1/ Costs	Material and Other Costs	Total Costs
Total	61,600	$913.0	$469.6	$1,382.5
New Rail	3,900	57.3	263.8	321.1
Relay Rail	3,300	48.7	(22.3)	26.4
Ties	6,300	92.9	144.0	236.9
Ballasting and Surfacing	2,600	38.9	44.6	83.4
Subtotal	16,100	237.8	430.1	667.8
Other	45,500	675.2	39.5 2/	714.7

1/ Based on $14,825 per worker, including payroll taxes, plus health and welfare benefits.

2/ Requires 634,000 ties.

While the major track projects are less labor-intensive, they are also more necessary to the provision of improved service. In addition, these projects will generate approximately 20,000 more jobs outside of the rail industry in the production of track materials and other support services. Because of their limited use of materials, the other projects would produce significantly fewer additions to non-rail employment.

The advantage of utilizing public service employment for the railroads is that a significant proportion of the work to be done is of a "one shot" nature, while a great percentage of the remaining work is needed only at rare intervals. Notwithstanding "maintenance of effort" implications for the railroads themselves, significant anticyclical and public policy objectives could be met by a public service employment program in the railroad industry.

Parks and Recreation

by Maxine Turner

Estimates of the growing demand for outdoor recreational opportunities--which are expected to expand at a rate one-third faster than that of the population--29/ indicate the existence of a significant opportunity for job creation.

In 1972, the Federal Government owned some 755.6 million acres administered by agencies concerned with recreation. For the National Park Service, Forest Service, and Bureau of Sport Fisheries and Wildlife alone, the total was 239.6 million acres. Another 473.9 million acres were under the control of the Bureau of Land Management.

Of the total, some 319.2 million acres were devoted to public outdoor recreation in 1972.30/ By administering agency, these were distributed as follows:

Agency level	Millions of acres
Federal	266.7
State	41.8
County	8.1
City	1.6
Township	.6
Park Districts and Regional Councils	.3

Federal Government expenditures for outdoor recreation stood at $573 million in 1972.

Legislation to preserve wilderness areas for multi-purpose use through the establishment of National Forests and National Parks goes back to the early years of this century. Since the mid-1960's, however, the pace of legislative activity has quickened considerably. The Wilderness Act and the Land and Water Conservation fund established by the 88th Congress, the National Wild and Scenic Rivers Act, the National Trails Systems Act, the Coastal Zone Management Act all provided a basis for new activities in conservation and in recreational development.

29/ Outdoor Recreation: A Legacy for America (Washington, D.C.: U.S. Department of Interior, Government Printing Office, 1973).

30/ Ibid.

At the State level, of the 250,000 acres under State control in Massachusetts, only 50,000 acres are now managed as parks and reservation land. But with the help of the Land and Water Conservation Fund, the State plans to acquire three new major areas: South Cape Béach, The Holyoke Mountain area and the Boston Harbor Islands. Local Conservation Commissions in Massachusetts hold another 44,000 acres, often maintained by volunteer crews, if at all.

The Metropolitan District Commission (MDC) in the Boston area is responsible for some 14,332 acres, including five major reservations, 17 miles of beaches, 26 skating rinks, 19 swimming pools, three golf courses, three harbor islands, 168 miles of roadway and two zoos.

The Boston Parks and Recreation Department is responsible for 2,000 acres, with 270 parks and playgrounds. However, like the other levels of government, the Commission in recent years has emphasized new land acquisition, rather than maintenance.

While open space acquistions will continue to increase, as will the need for development and maintenance staff, it is extremely difficult to project future staffing requirements. First, in order to determine maintenance needs, one must define a "standard" for reference and then determine how many persons and how much time is needed to maintain that standard. The National Park Service has published a guide called Maintenance of Physical Facilities Standards, which attempts to do this and can be used by other agencies to determine manpower needs. For example, on a heavily-used beach, should trash barrels be emptied everyday, once a week, or every hour? It appears that most urban park maintenance programs use a minimal standard, indicating that a considerable number of additional workers could be utilized to upgrade maintenance levels. However, such constraints as truck pick-up capability and the availability of dumping facilities must also be considered. This question of supportive services becomes critical when adoption of a large scale effort to improve maintenance by hiring more workers creates concommitant needs for equipment, tools, and cleaning supplies.

However, it appears that there is almost unlimited capacity to absorb large numbers of entry-level workers for park maintenance if certain constraints can be dealt with. The most critical need is for supervisory personnel, both now and for the future. Workforce projections should include one supervisory position for every 6 to 10 labor slots. Other related support issues, such as equipment availability, supplies, and transportation for workers from areas of high unemployment to the parks and open spaces in outlying areas not served by public transportation, have to be considered.

The current plight of park maintenance crews is well illustrated by the situation in the MDC. Some 413 positions are authorized in the table of organization, but there are funds for only 368. Most of these--250--are in laborer and skilled laborer classifications.[31]

Elaborate charts exist for various tasks and functions within the MDC park system, but these must be evaluated with reference to the standard of maintenance one is attempting to meet. Here, too, it must be stressed that strong supervisory staffing and increased support services would have to be provided before additional workers could be effectively utilized. Again, budget cuts and no-hiring policies affect the validity of the staffing projections. Goals are set which have a possibility of being filled, but few attempts are made to project the maximum staffing potential which would allow for new or more intensive development and management of parklands.

For example, the forestry maintenance section is totally involved in the removal of dead or dangerous trees. The two existing crews are "overwhelmed by the backlog of work," which is assigned on a crisis basis. Normal corrective and preventive maintenance is almost non-existent. Projections for 27 new positions in this division would keep pace with these needs, but do not allow for more intensive or creative forest management options,.such as interpretive trail development, demonstration plots, wildlife and ecological management.

A staffing comparison was made of the Middlesex Falls Reservation between 1964 and 1976 to show the impact of budget cuts on the Parks Division. In 1964, 88 workers were assigned to this area, but the number had dropped to 61 in 1976, while additional areas of responsibility had been added. It is assumed that similar comparisons made for other publicly-owned or maintained parks would uncover the same pattern: a decrease in maintenance staffing because of budget cuts and hiring restrictions, accompanied by the addition of new acquisitions and responsibilities.

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[31] The most common entry-level positions available in park maintenance in Massachusetts under Civil Service are Conservation Helper and Skilled Conservation Helper, at Grades 7 and 8 respectively. This corresponds to Laborer and Skilled Laborer. Salaries at Grade 7 range from $3.33/hour to $4.03/hour, $133 to $161 weekly; salaries at Grade 8 range from $3.46/hour to $4.21/hour, $138 to $168 weekly. Other titles include: Park Foreman, Forest and Park Supervisor, Groundskeeper, and Tree Climber.

Nearly any park improvement project has potential for a job creation program. For example, the Boston area Metropolitan District Commission is now administering a Title X Economic Development and Public Works Act project to improve two of the Boston Harbor Islands. The grant is for $500,000, and will employ 45 workers and 10 to 15 staff.

The city of Boston is transferring 24 urban sites to the city Conservation Commission under a Federally-financed urban wilds program. It is estimated that 20 to 28 persons will be needed to carry out the development phase of putting them into shape for public use.

In Greenfield, Massachusetts, CETA workers have been used to raise vegetable gardens on county land, and the produce has been given away to low-income families or delivered to Senior Citizen Centers and non-profit day-care centers. The availability of the free vegetables is announced weekly, complete with details as to the varieties in abundance, through the local newspaper. Such gardening was a major WPA activity in Massachusetts in the 1930's, and might be again. State-owned land offers great opportunity for such a program on a large scale.

The dilapidated condition of many of Boston city parks and the high unemployment rates of inner city youths, black and white, suggest the possibility of a large scale program of park establishment, rehabilitation, and neighborhood maintenance. If responsibility and employment opportunities could be pin-pointed by neighborhood, such a program might help with park vandalism too. The rebuilding of New York City's parks with Federal funds in the winter of 1933-34 is an example of what can be done in this regard.

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Where to Get More Information

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